Replacement Sheet

OIPE JC130
MAY 12 2005
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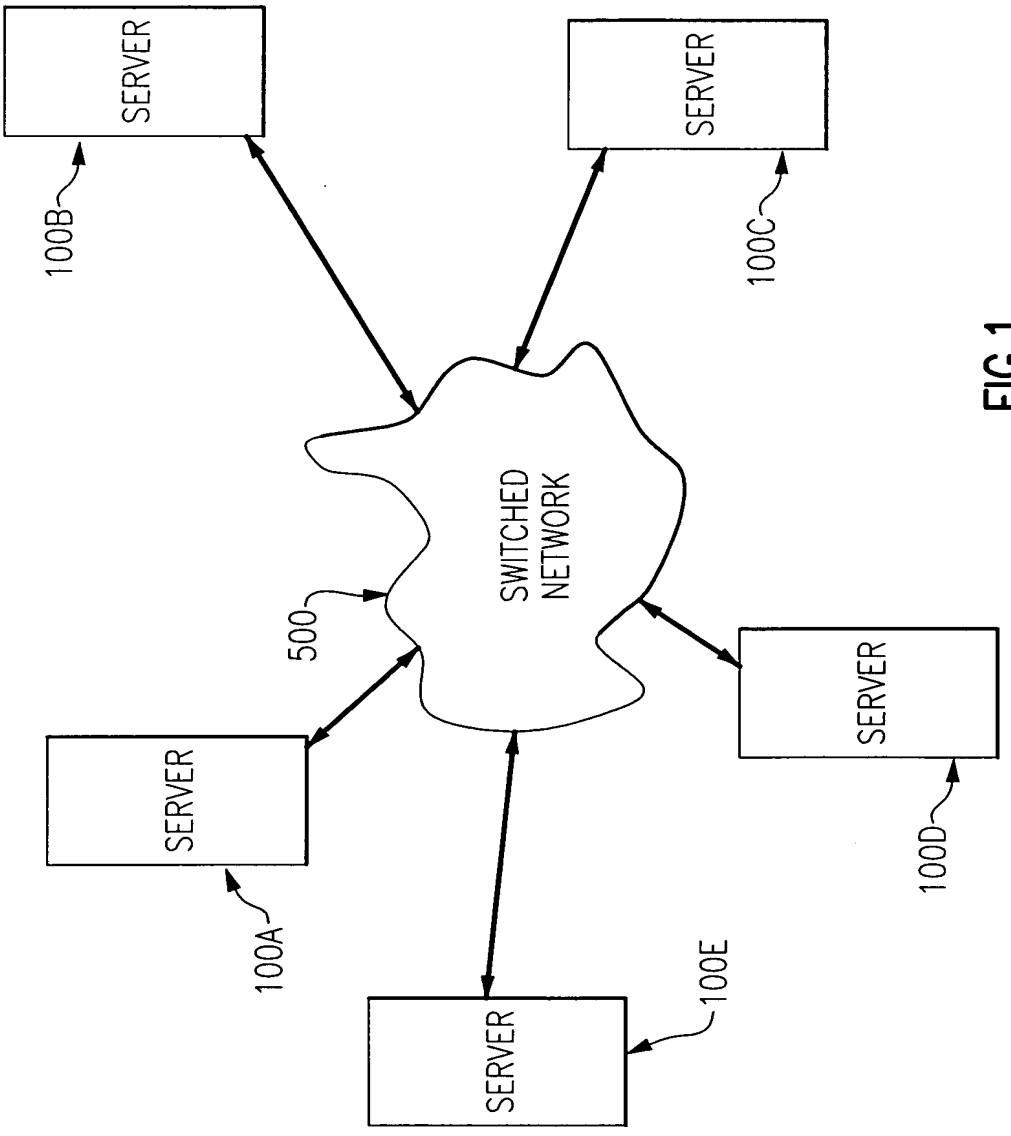

FIG.1

Replacement Sheet

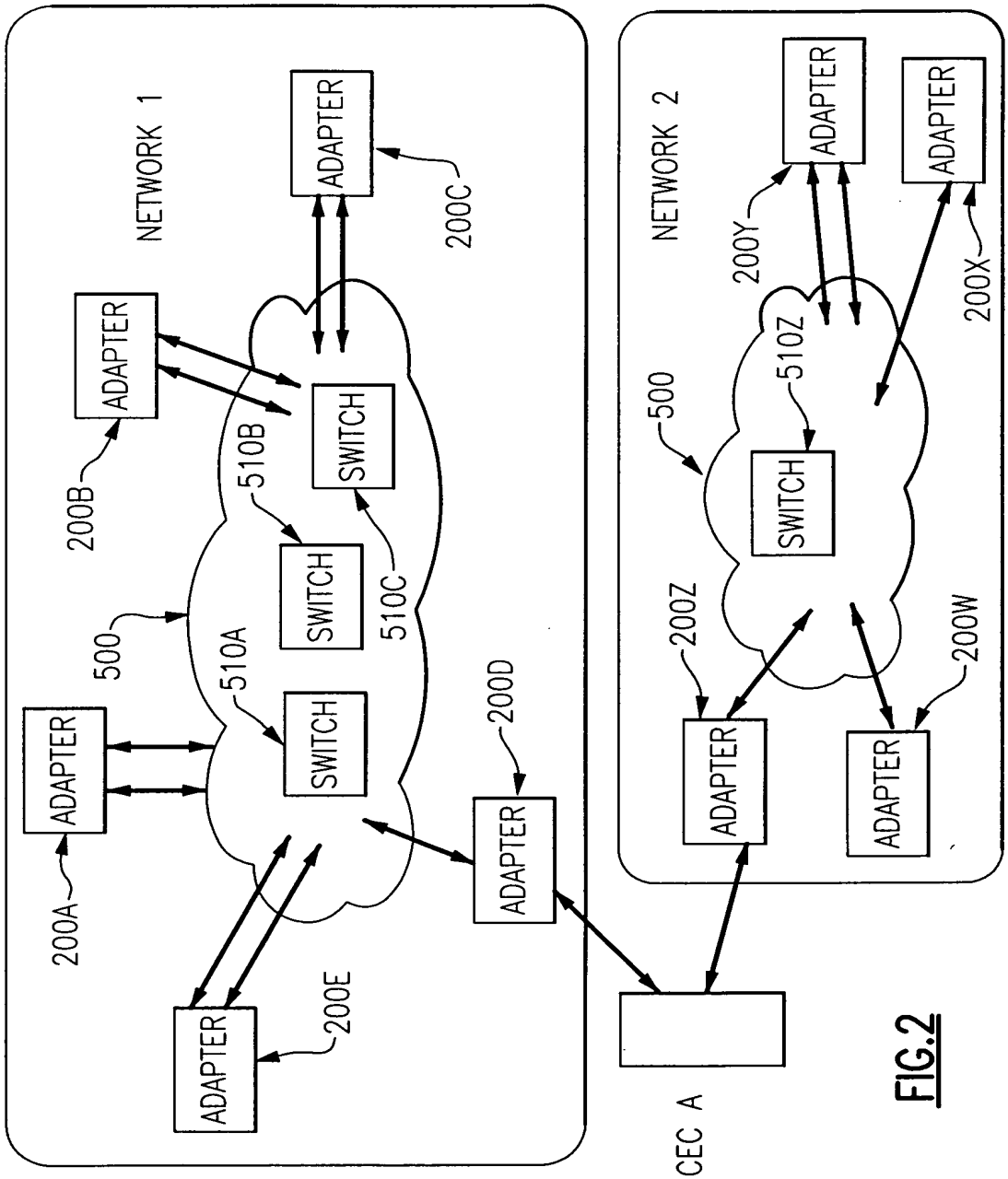

FIG.2

Replacement Sheet

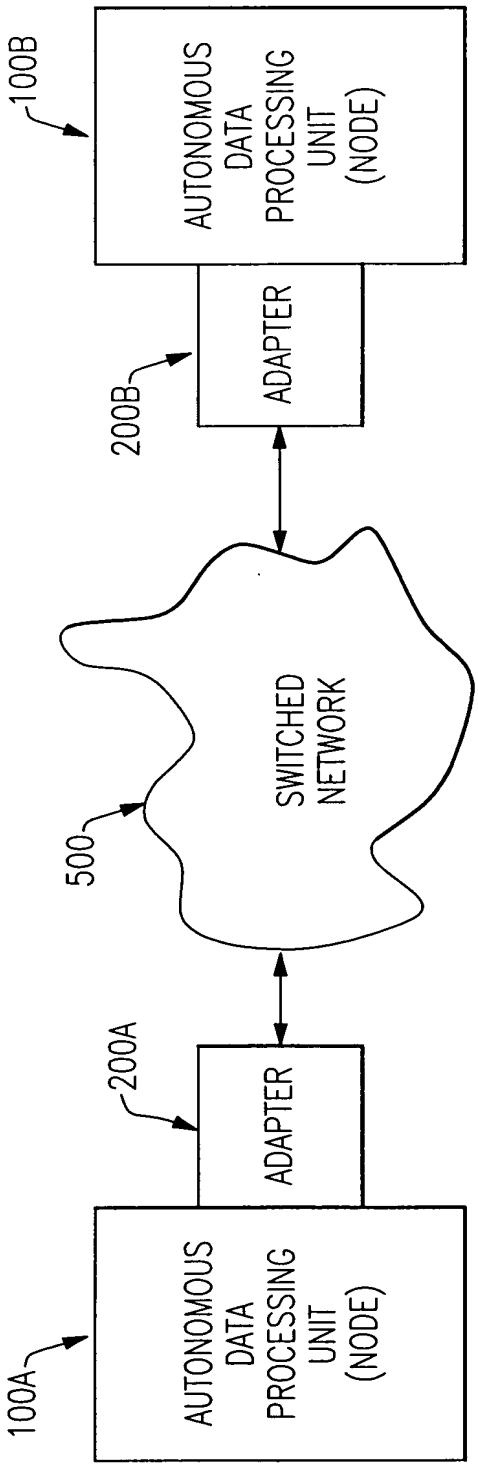

FIG.3

Replacement sheet

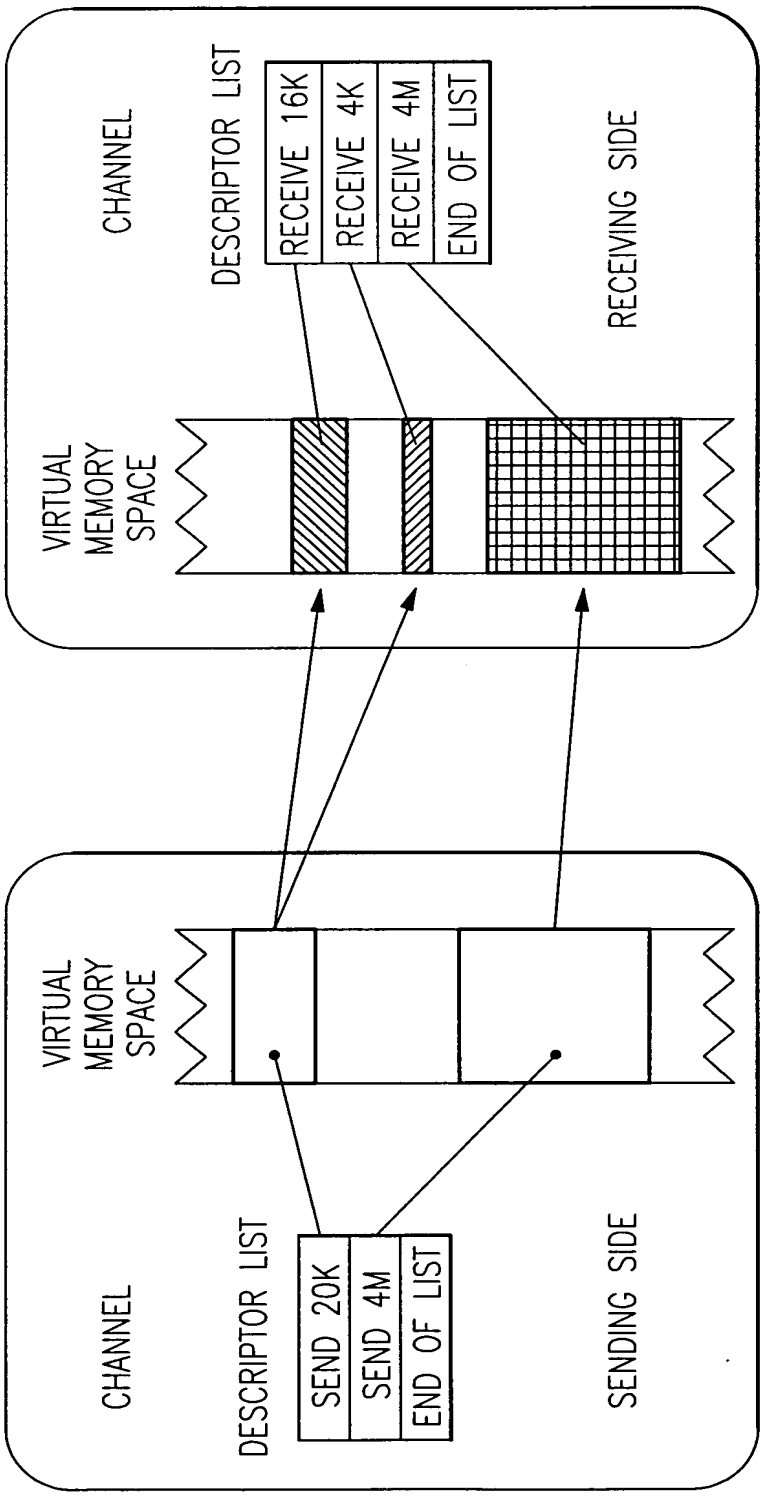

FIG.4

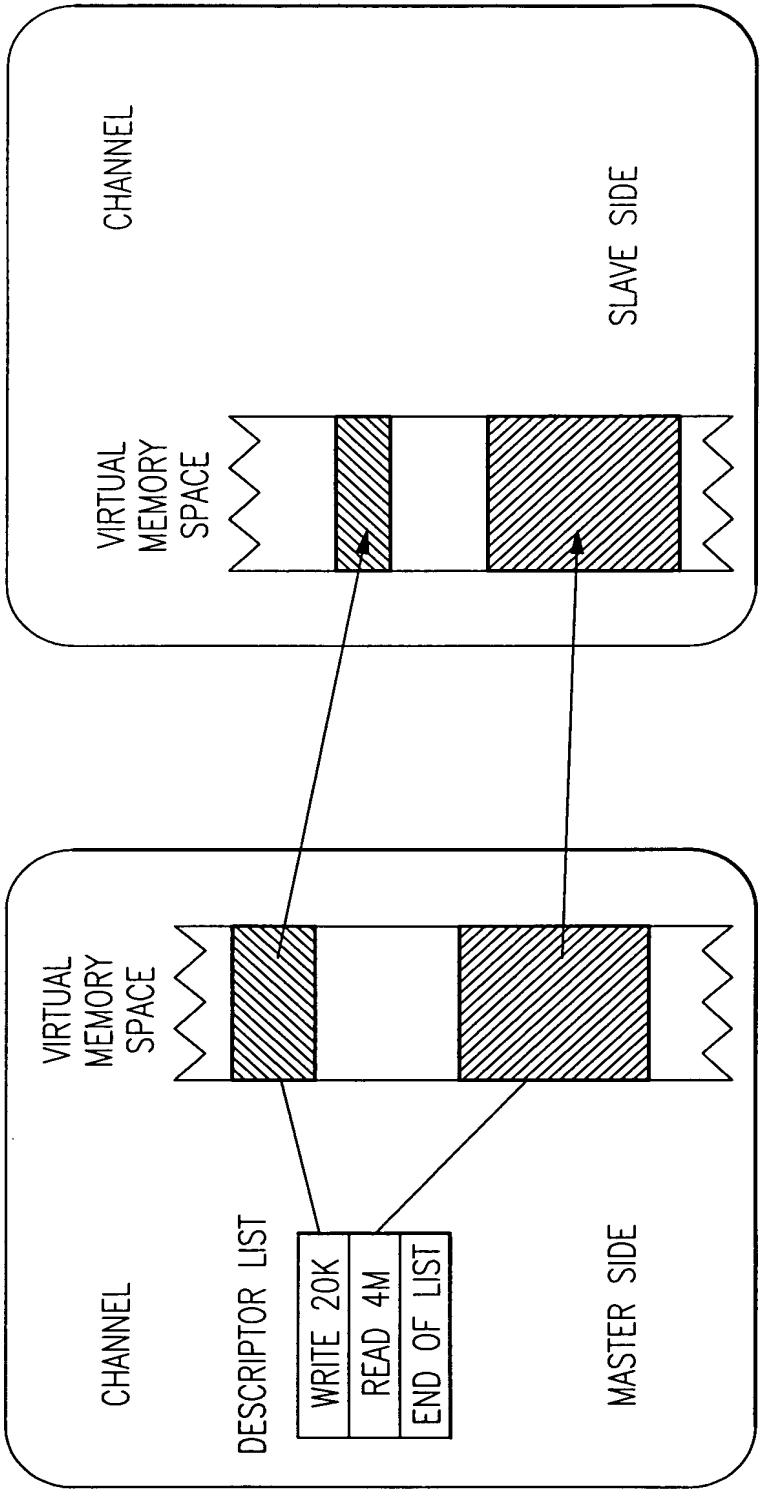
CHANNEL
SLAVE SIDE
VIRTUAL MEMORY SPACE
VIRTUAL MEMORY SPACE
CHANNEL
DESCRIPTOR LIST
WRITE 20K
READ 4M
END OF LIST
MASTER SIDE

FIG.5

Replacement Sheet

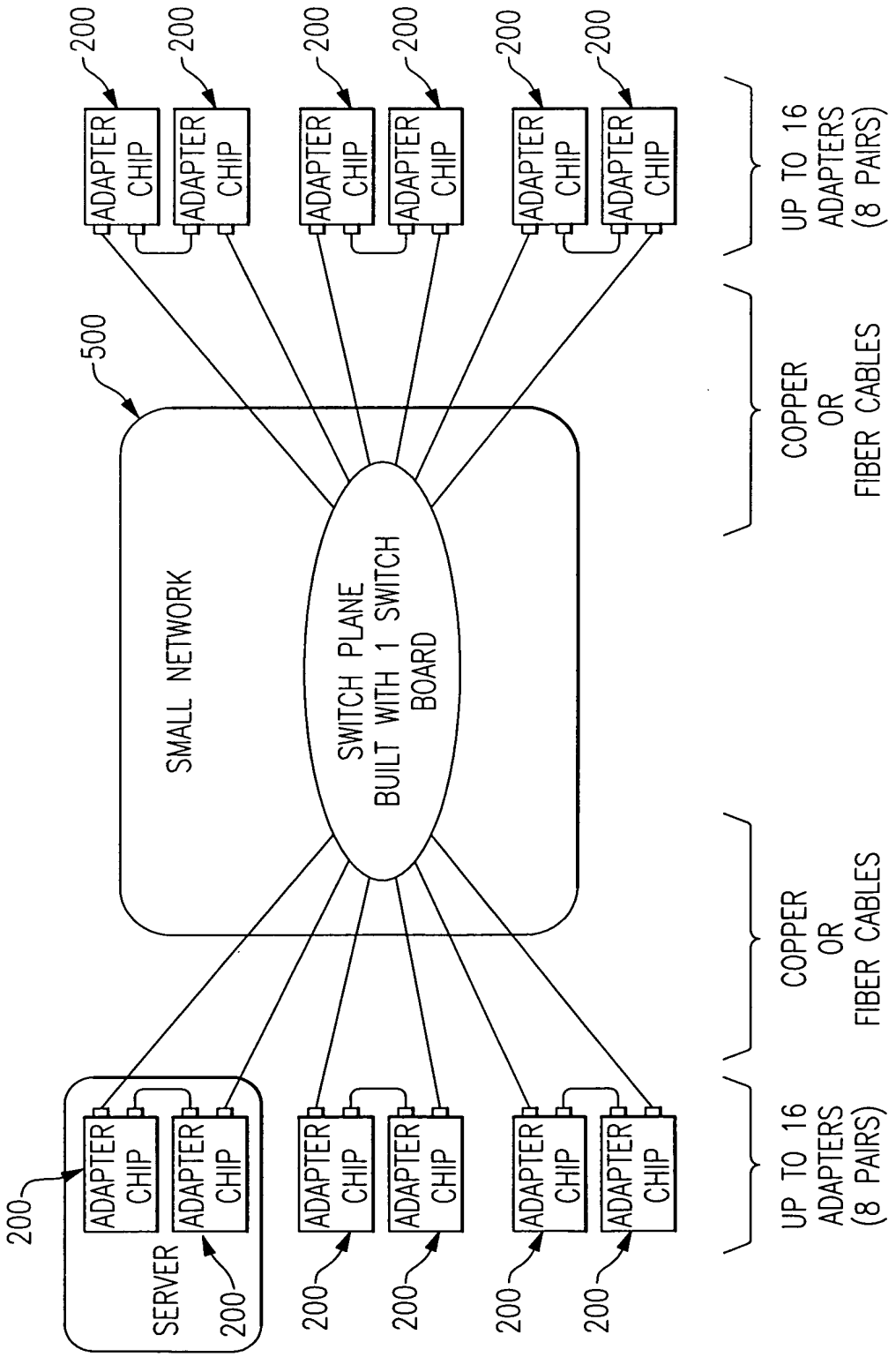

FIG.6

Replacement Sheet

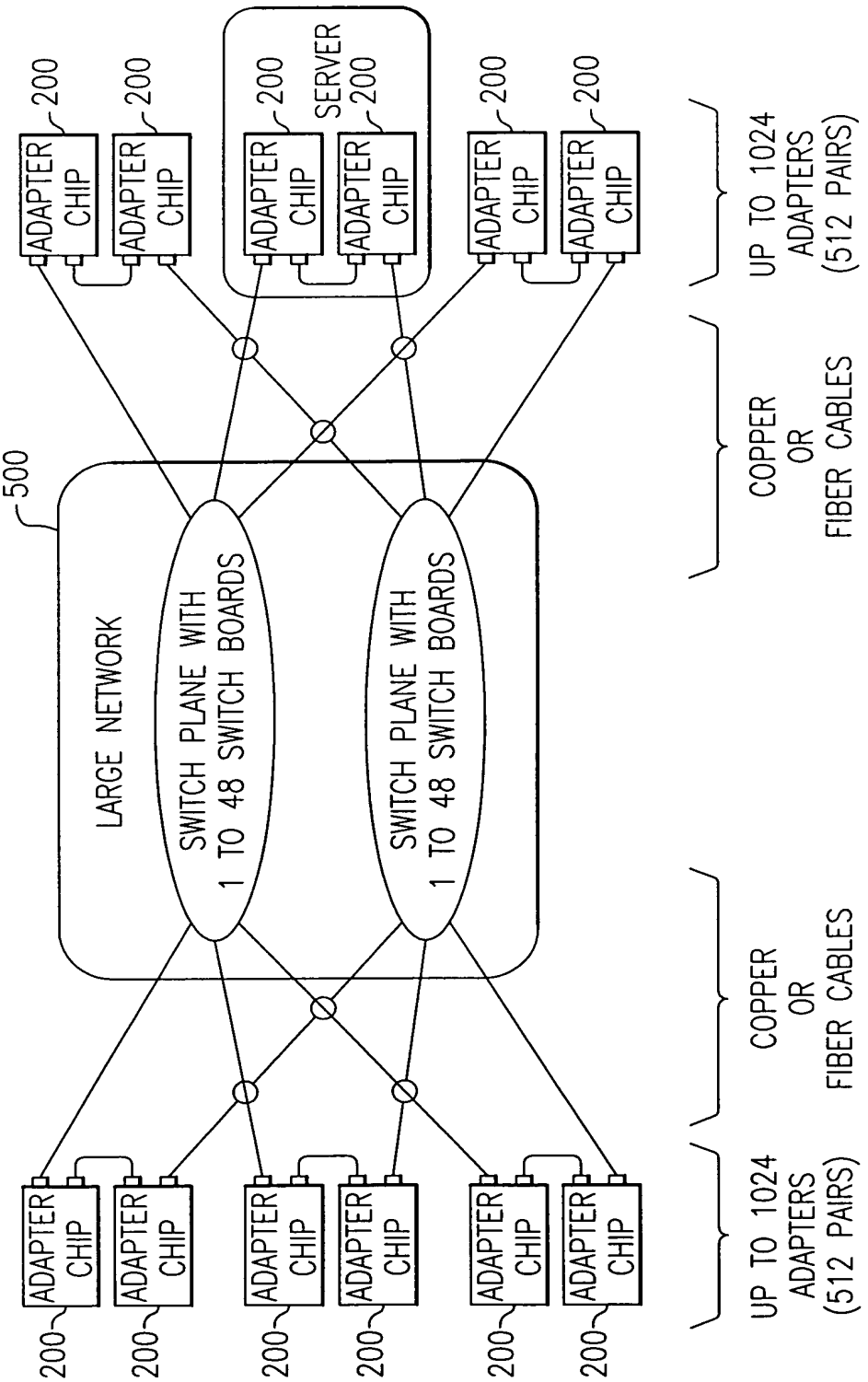

FIG.7

replacement sheet

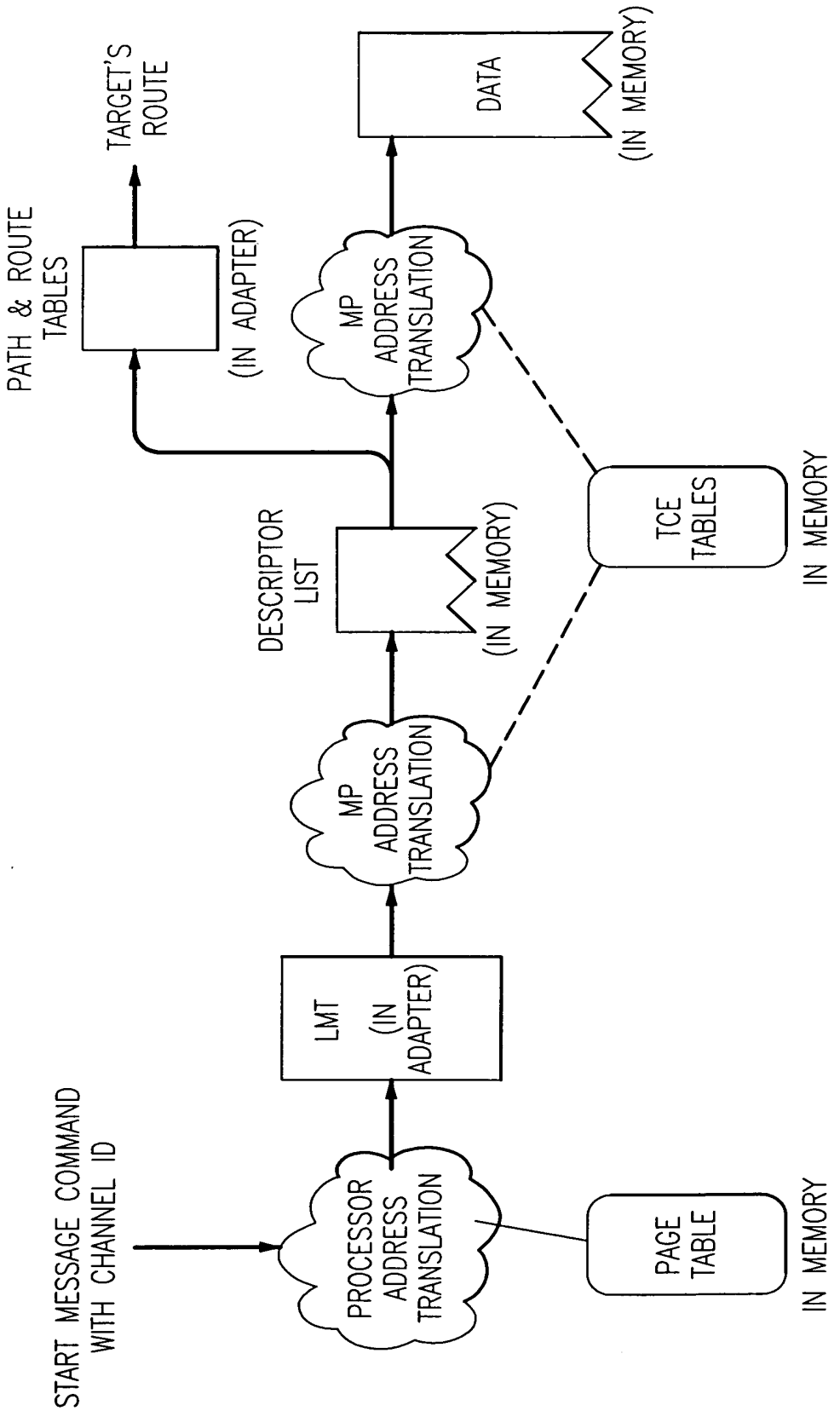

FIG.8

Replacement sheet

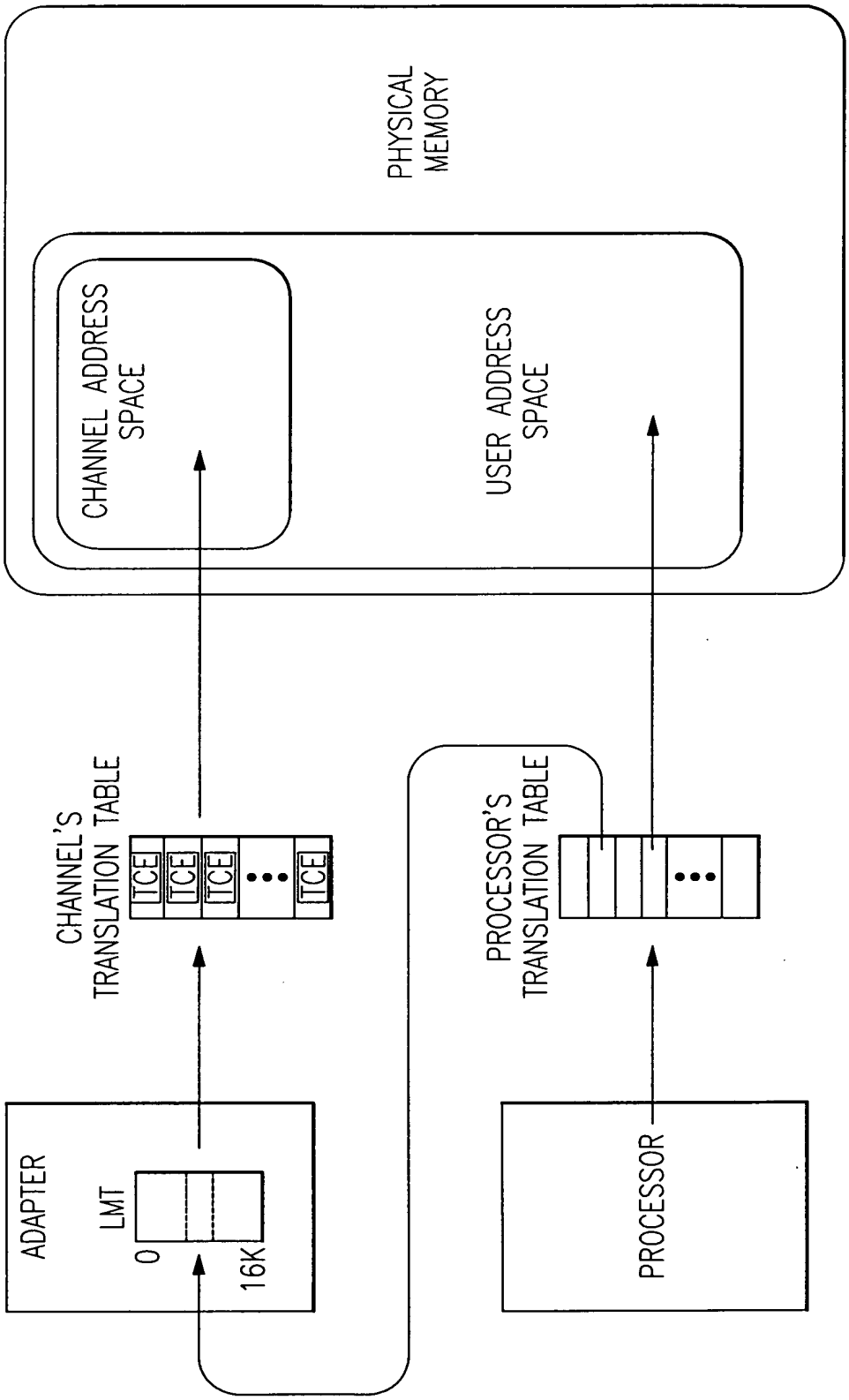

FIG.9

replacement sheet

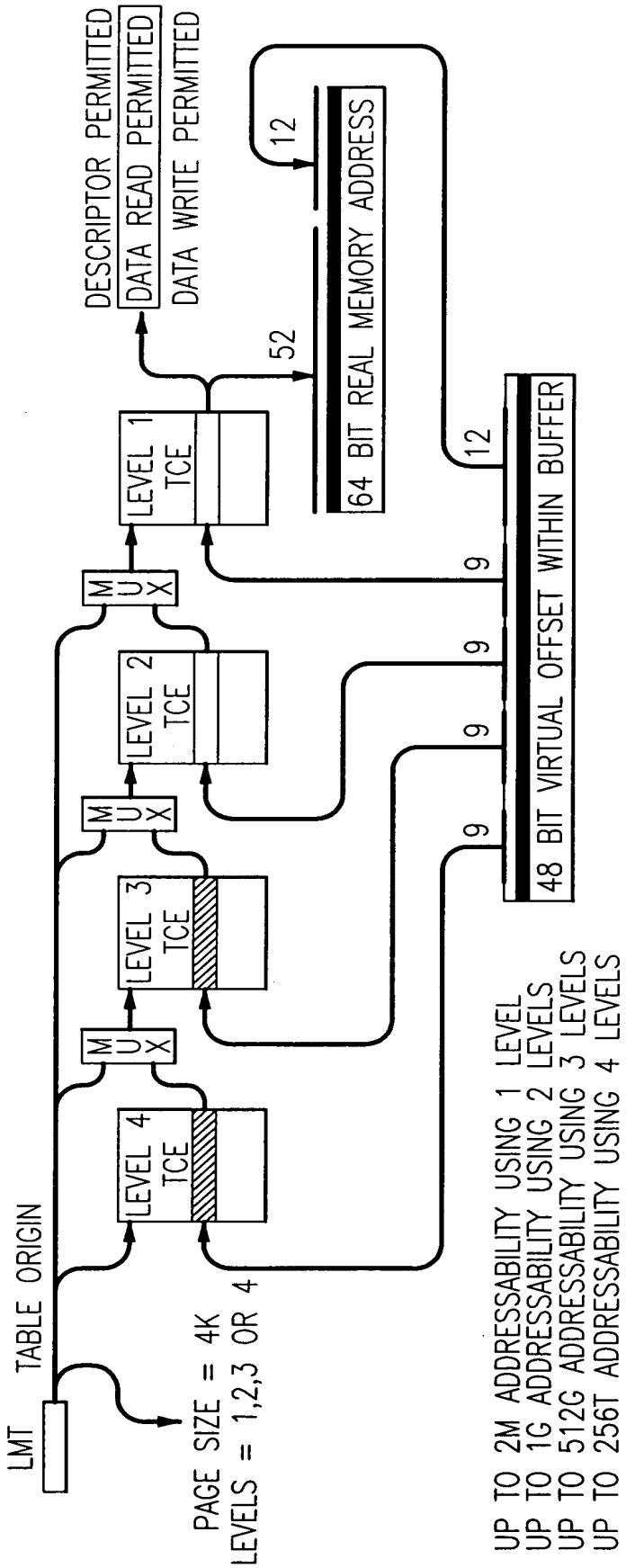

FIG.10

Replacement sheet

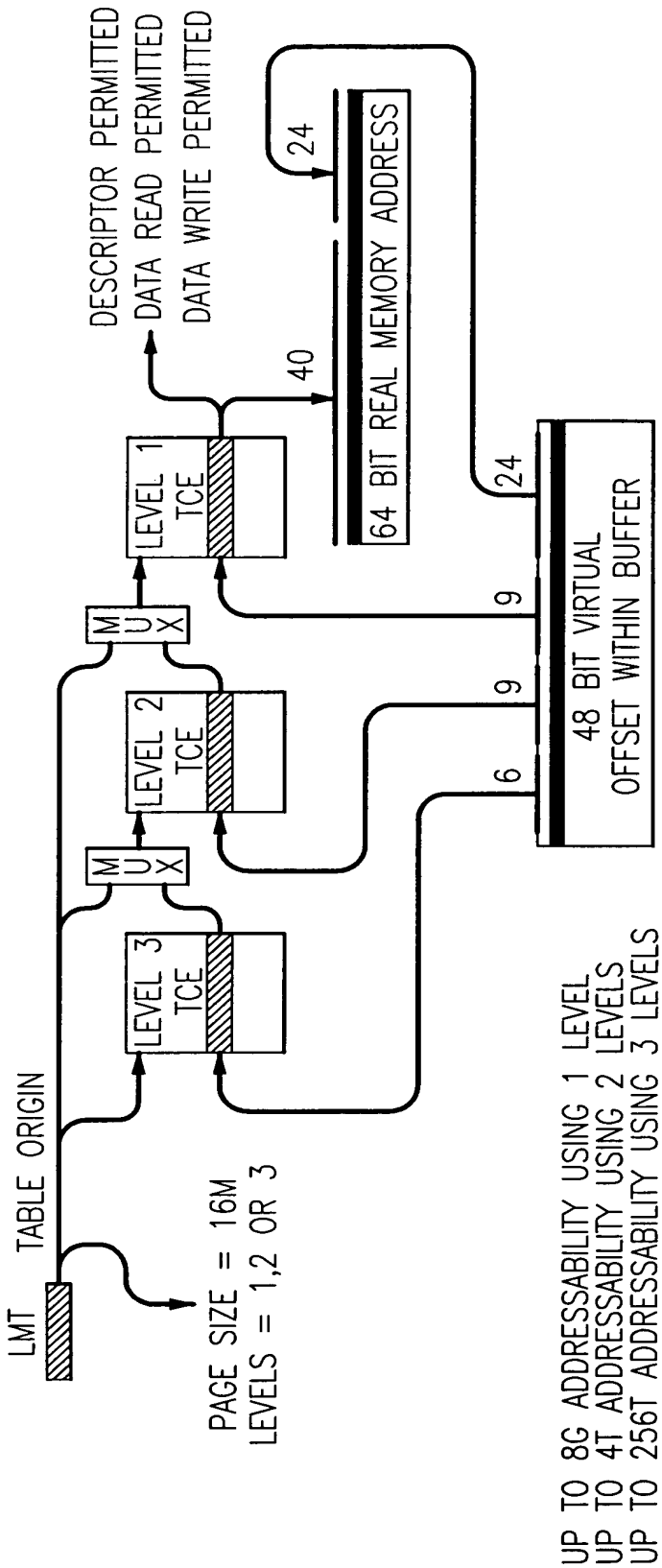

FIG.11

Replacement sheet

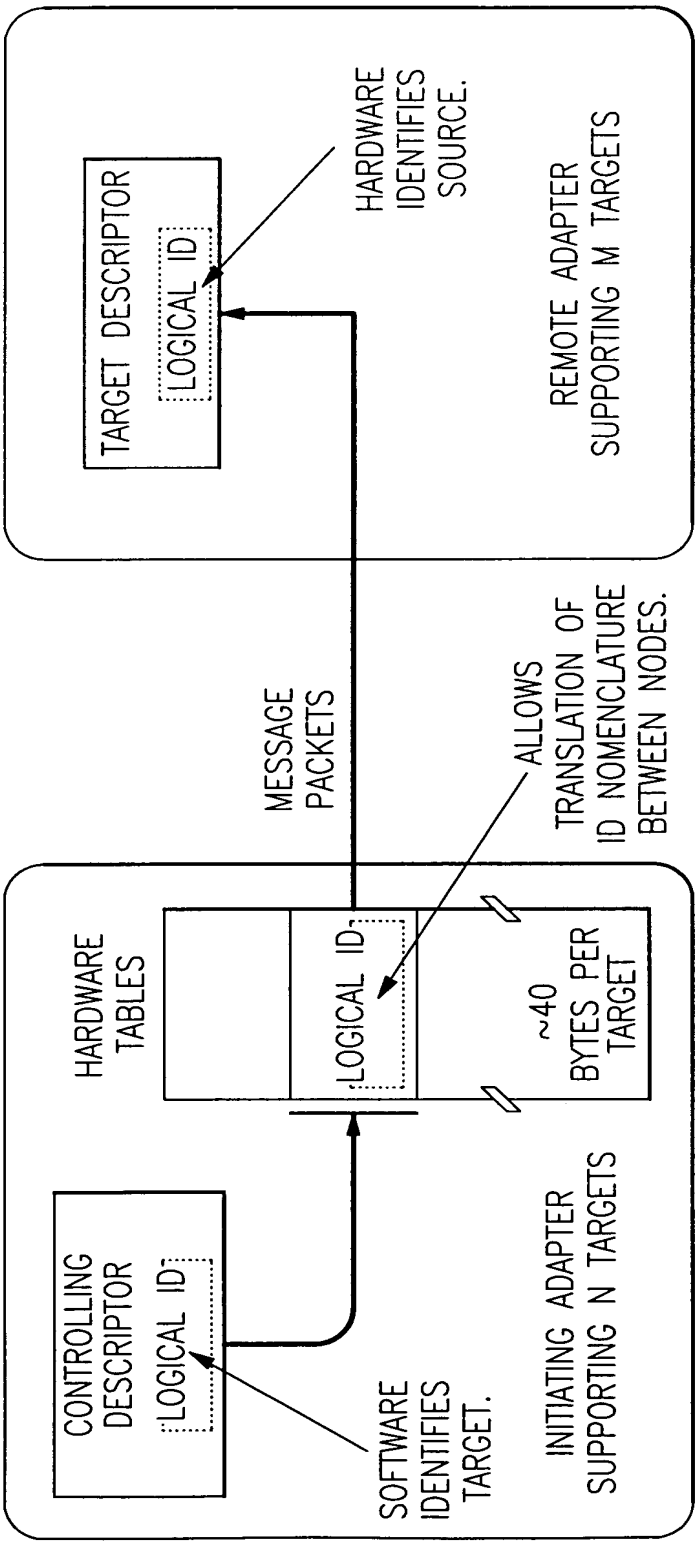

FIG.12

Replacement sheet

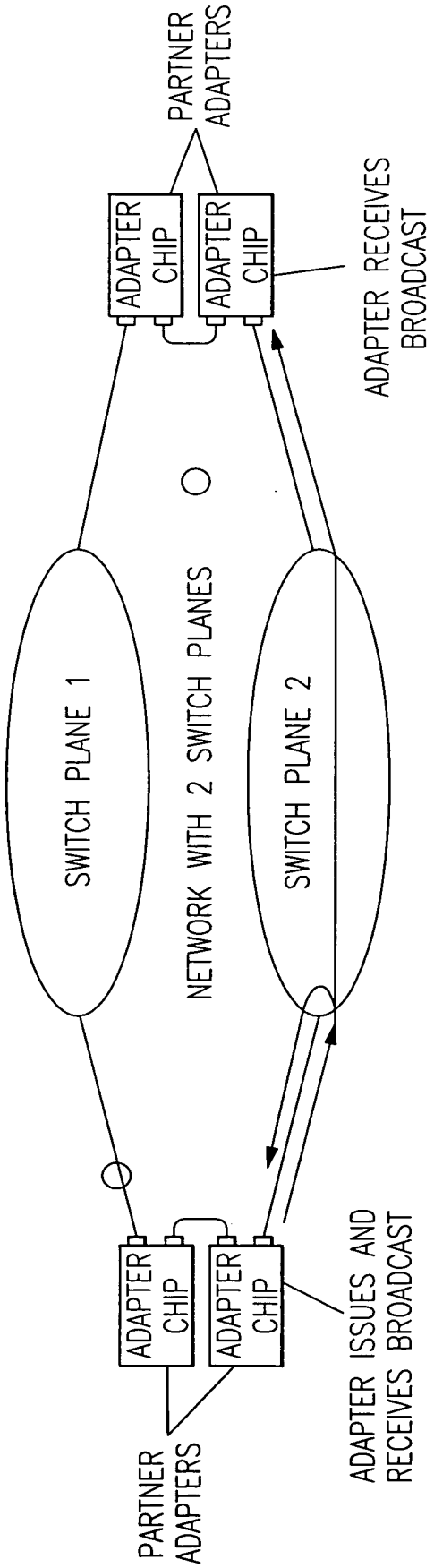

FIG.13

Replacement Sheet

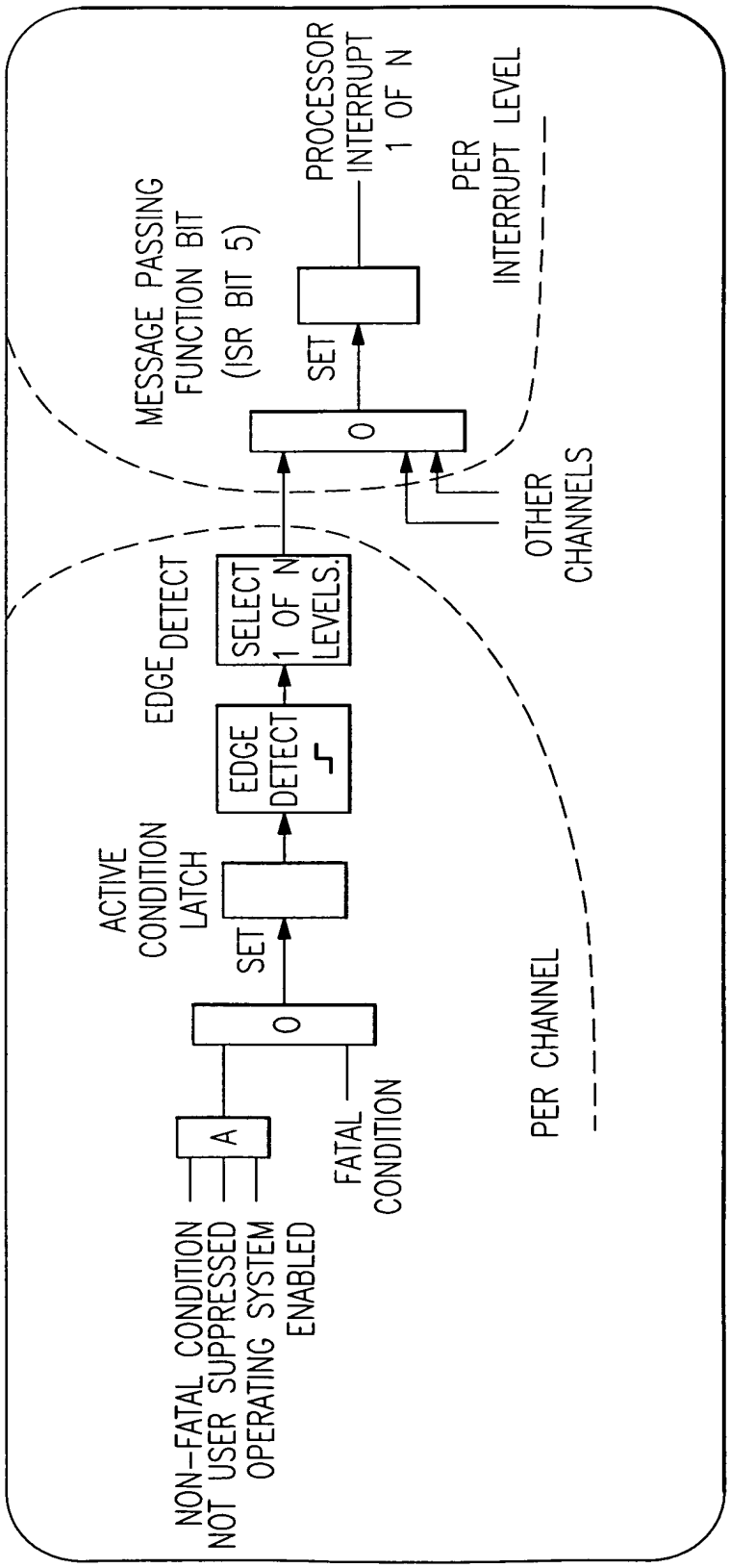

FIG.14

Replacement sheet

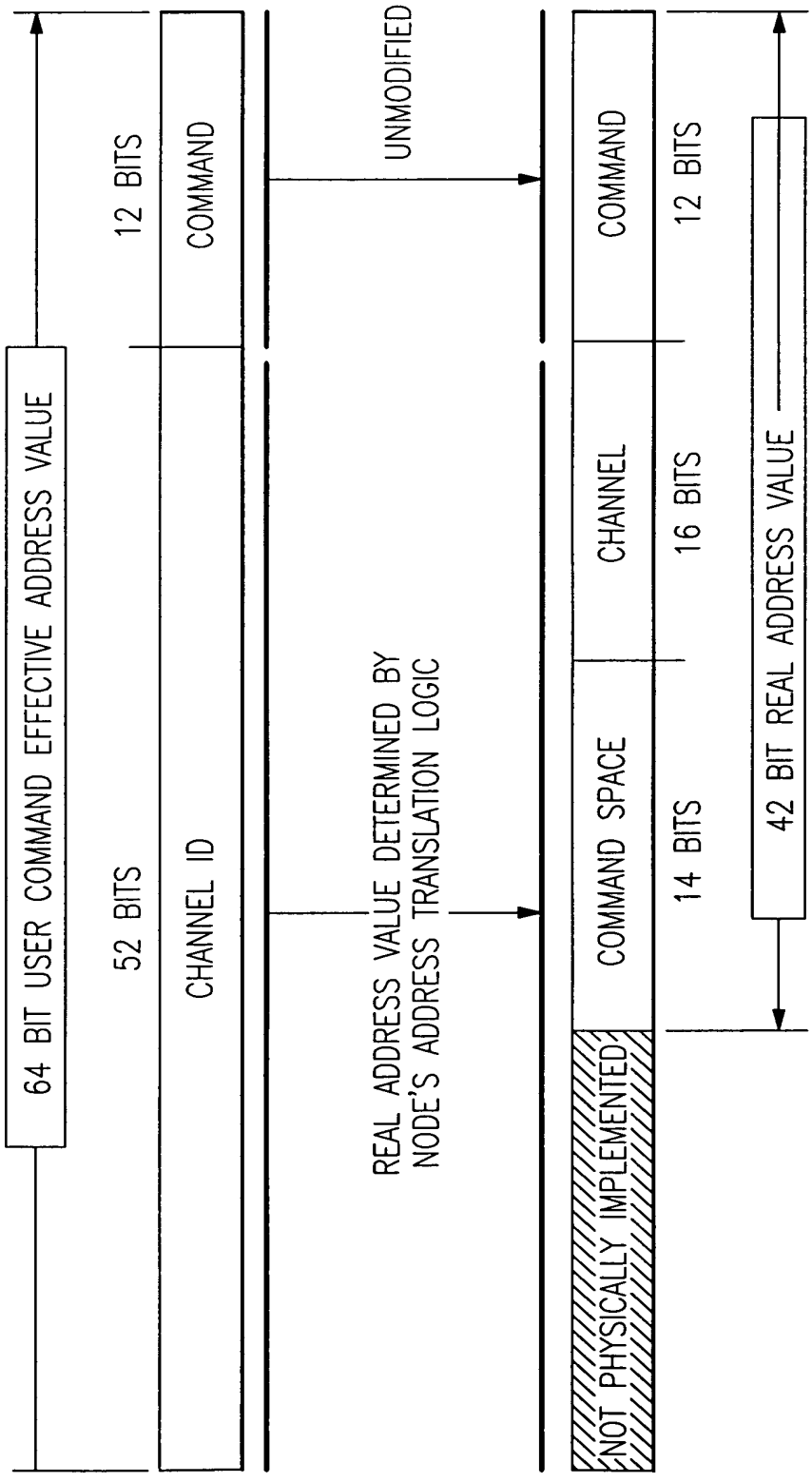

FIG.15

replacement sheet

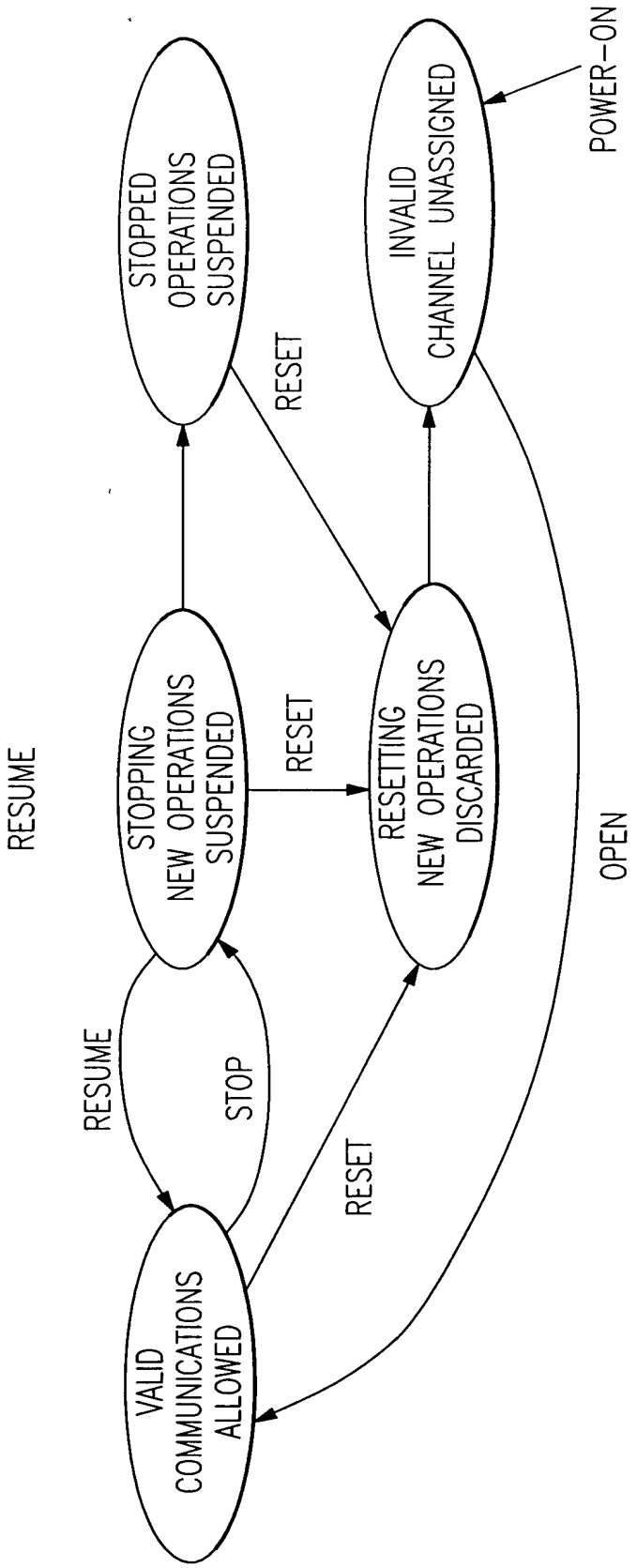

FIG.16

Replacement sheet

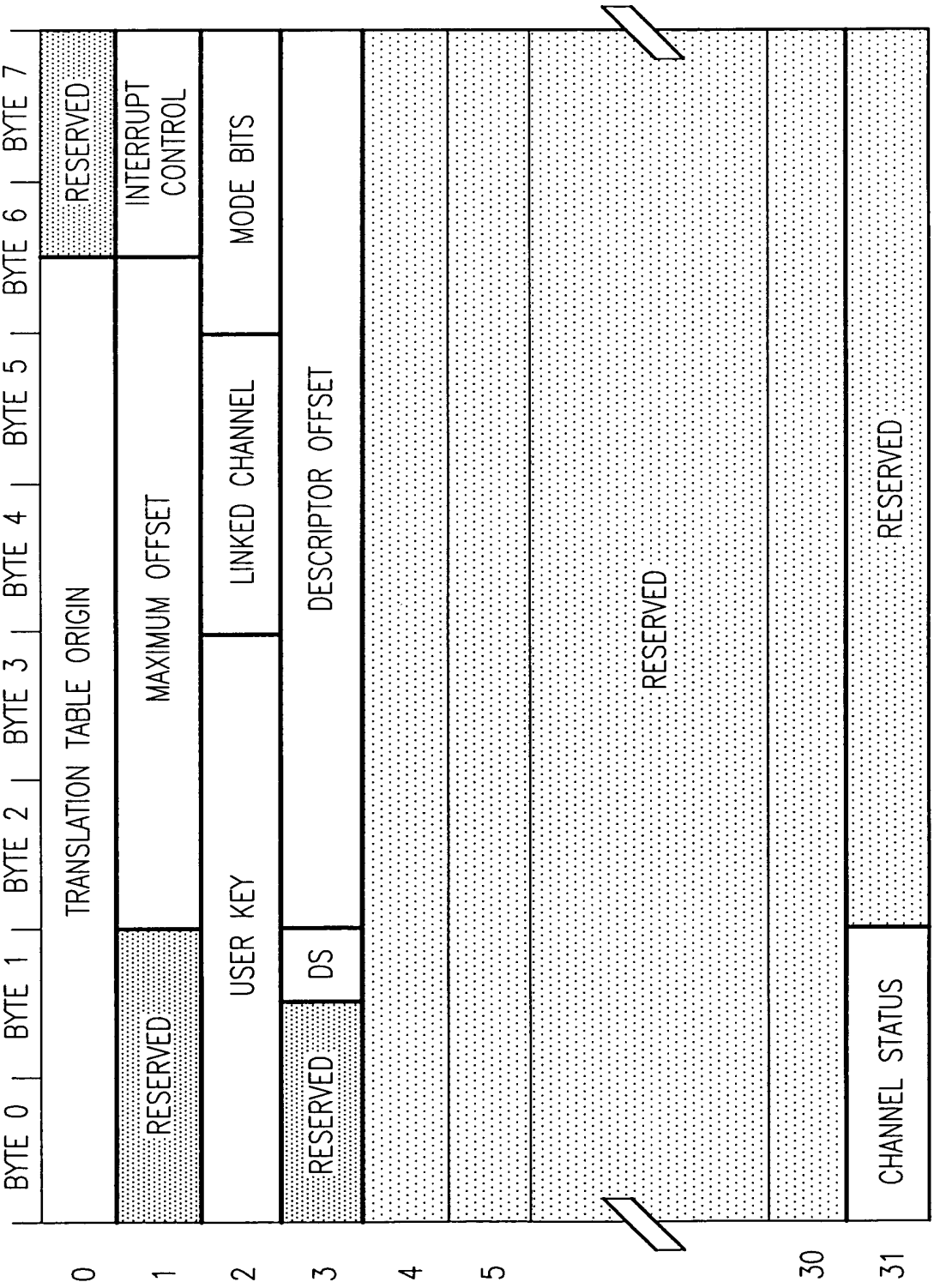

FIG.17

Replacement sheet

TCE FORMAT

FIG.18

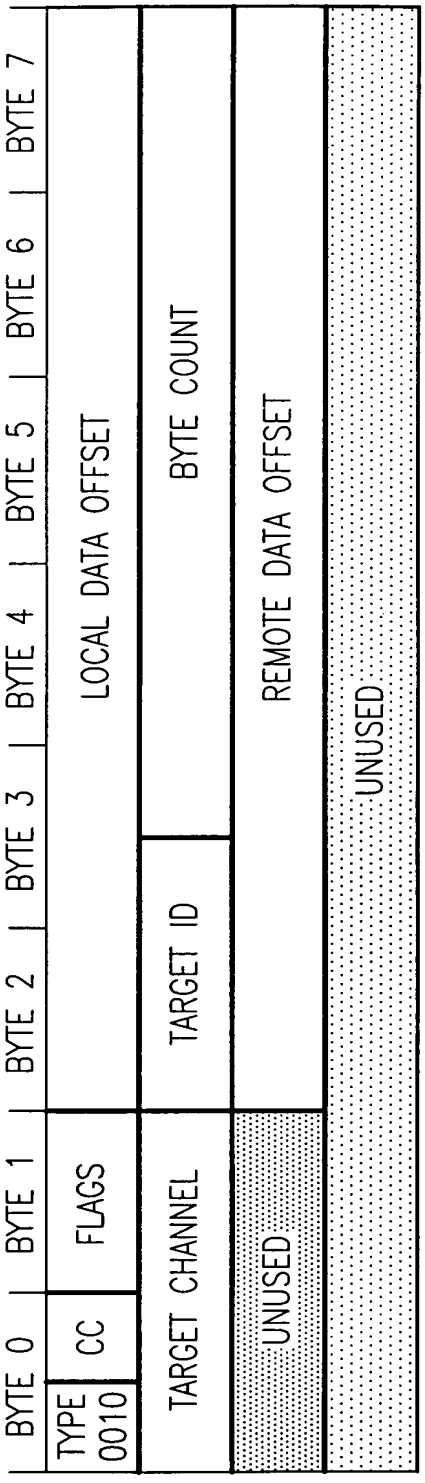

FIG.19

Replacement sheet

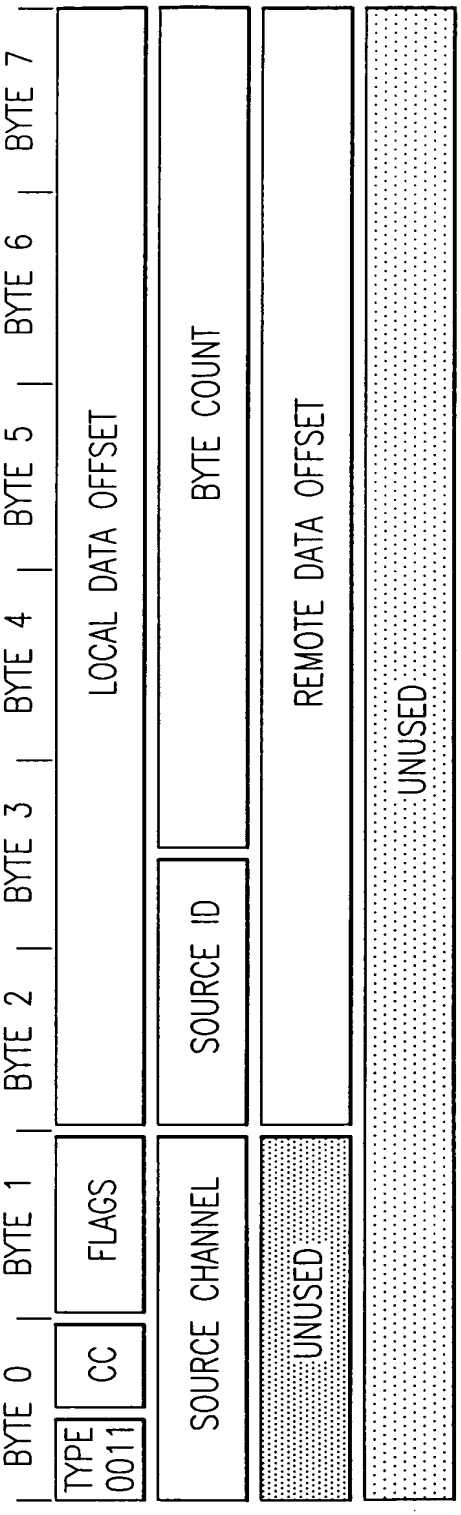

FIG.20

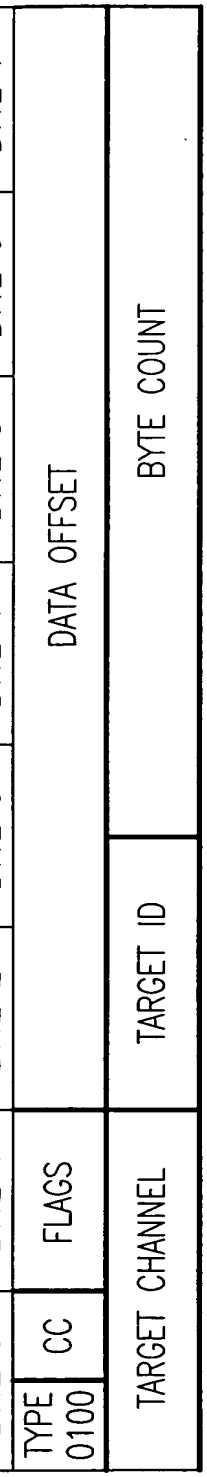

FIG.21

replacement sheet

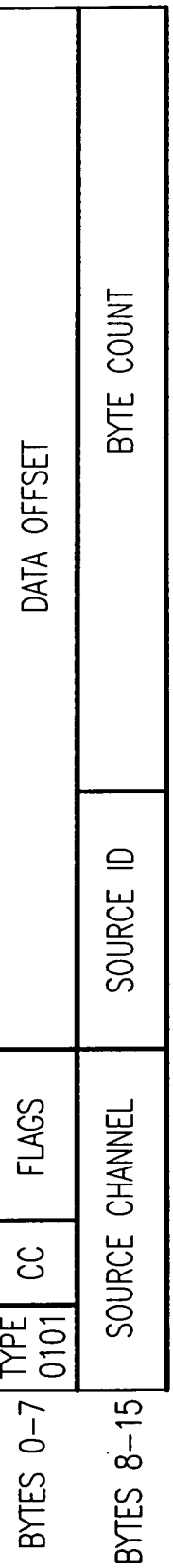

FIG.22

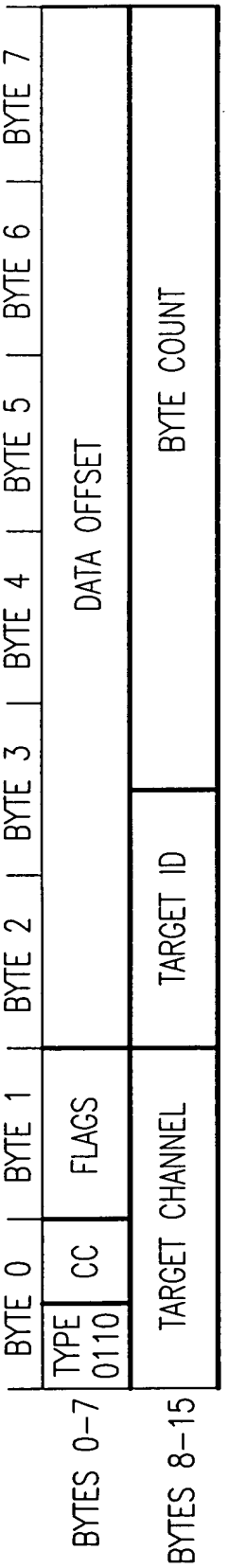

FIG.23

replacement sheet

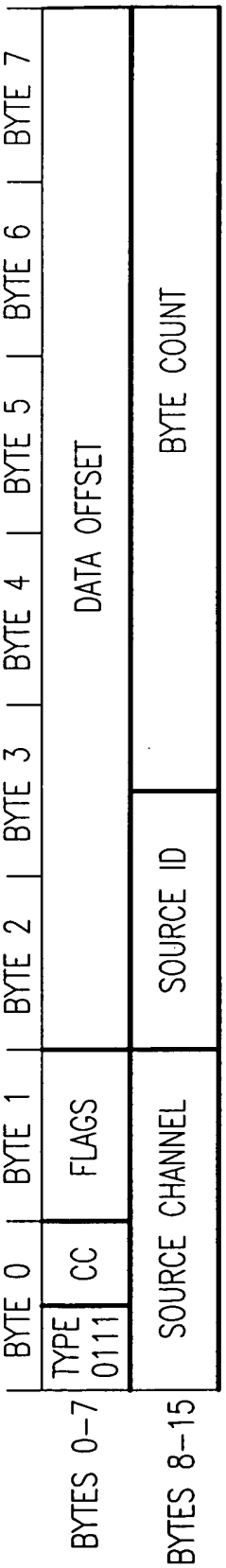

FIG.24

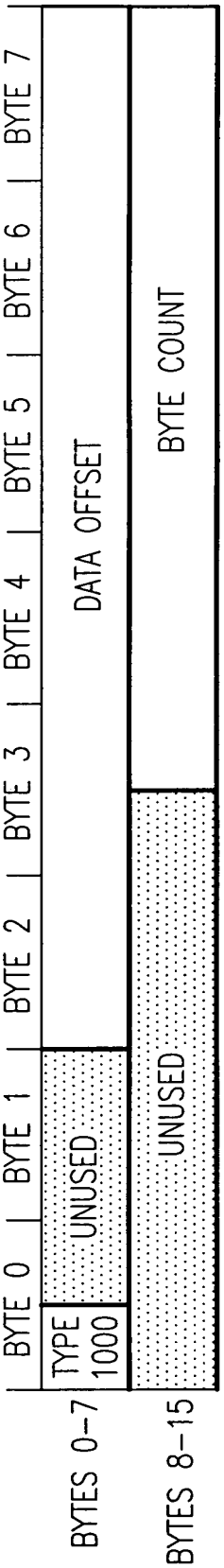

FIG.25

Replacement sheet

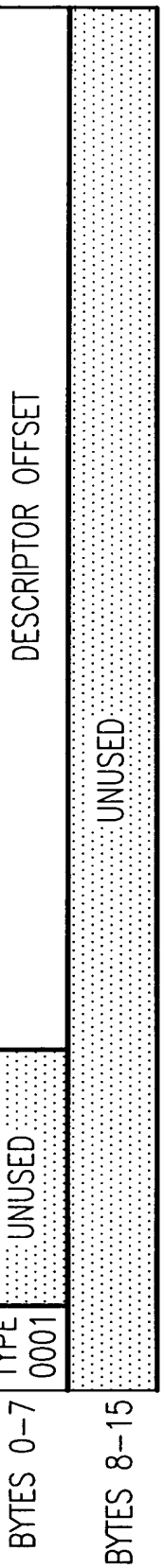

FIG.26

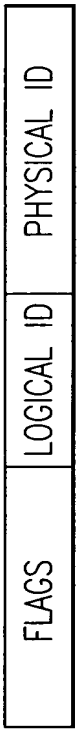

FIG.27

	BYTE 0	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
PATH 0	0000	ROUTE NIBBLES						PORT
PATH 1	0000	ROUTE NIBBLES						PORT
PATH 2	0000	ROUTE NIBBLES						PORT
PATH 3	0000	ROUTE NIBBLES						PORT

FIG.28

	BYTE 0	BYTE 1	BYTE 2
REGISTER 0	LOOKUP TABLE INDEX		PORT
REGISTER 1	LOOKUP TABLE INDEX		PORT
REGISTER 2	LOOKUP TABLE INDEX		PORT
REGISTER 3	LOOKUP TABLE INDEX		PORT

FIG.29

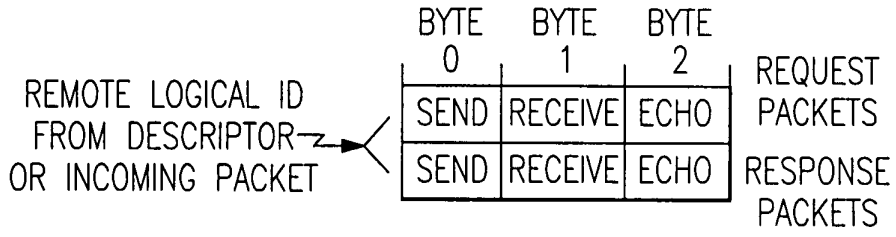

FIG.30

Replacement sheet

replacement sheet

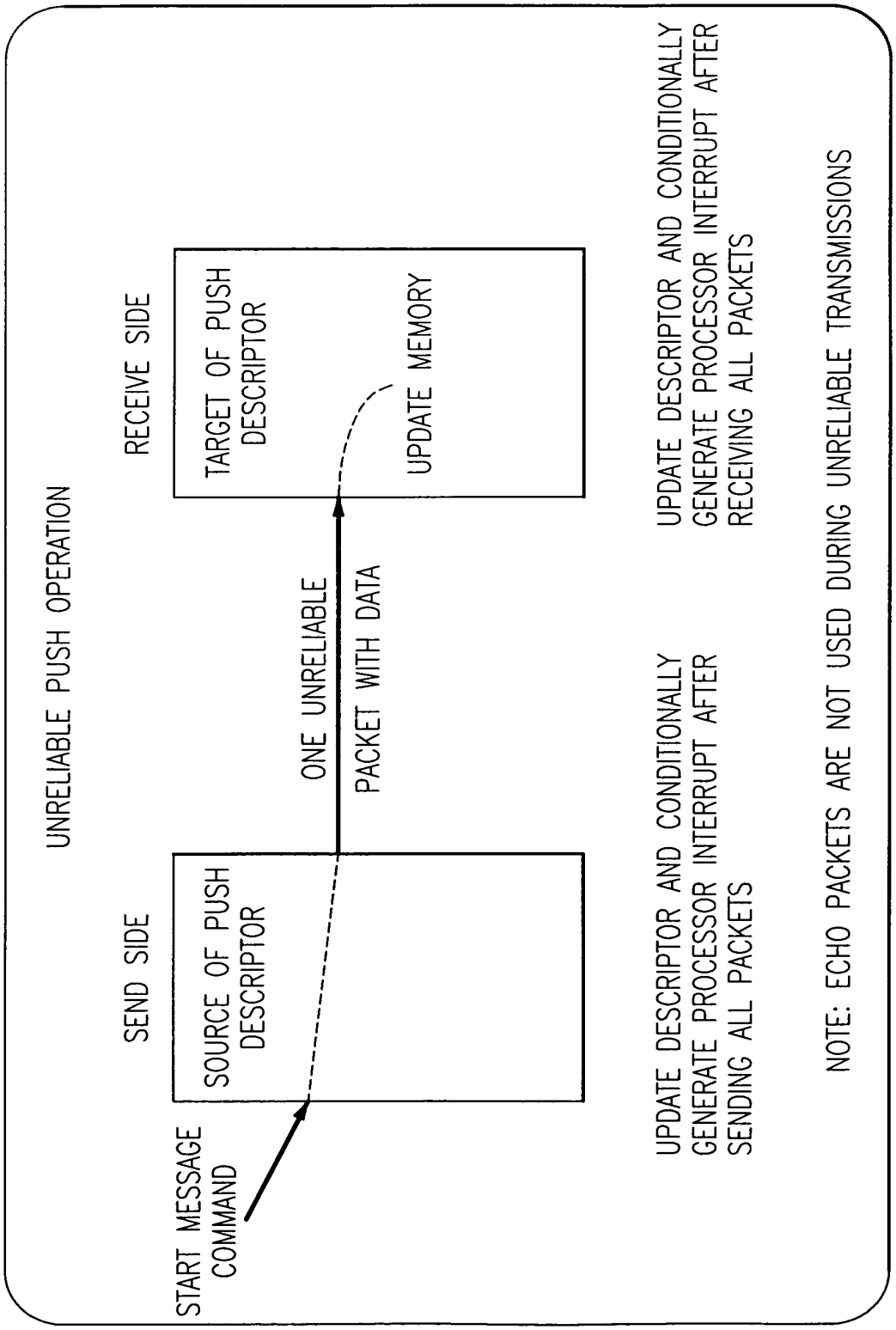
UNRELIABLE PUSH OPERATION
SEND SIDE
RECEIVE SIDE
START MESSAGE COMMAND
SOURCE OF PUSH DESCRIPTOR
ONE UNRELIABLE PACKET WITH DATA
TARGET OF PUSH DESCRIPTOR
UPDATE MEMORY
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER SENDING ALL PACKETS
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING ALL PACKETS
NOTE: ECHO PACKETS ARE NOT USED DURING UNRELIABLE TRANSMISSIONS

FIG.31

replacement sheet

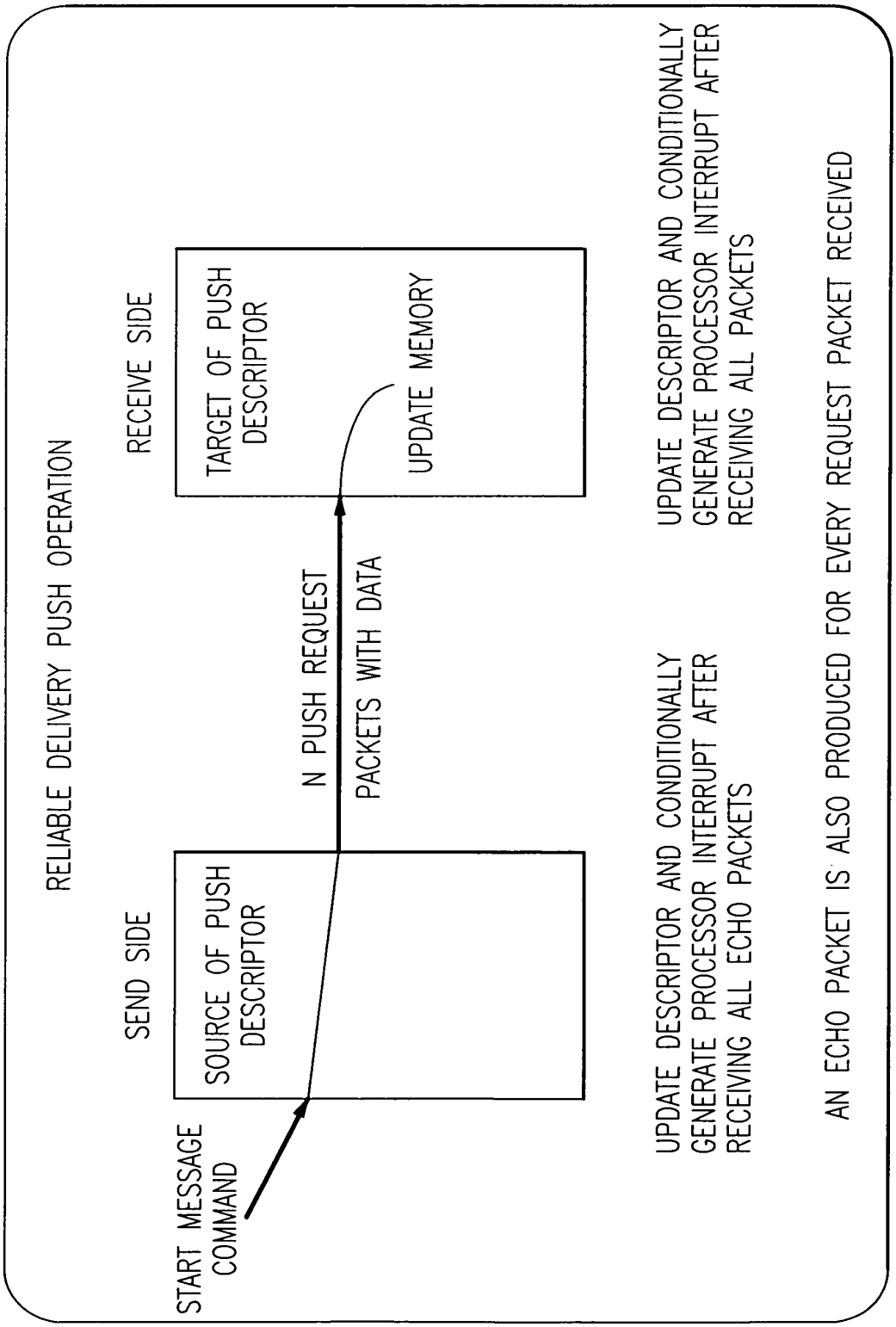
RELIABLE DELIVERY PUSH OPERATION
SEND SIDE
RECEIVE SIDE
SOURCE OF PUSH DESCRIPTOR
TARGET OF PUSH DESCRIPTOR
START MESSAGE COMMAND
N PUSH REQUEST
PACKETS WITH DATA
UPDATE MEMORY
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING ALL ECHO PACKETS
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING ALL PACKETS
AN ECHO PACKET IS ALSO PRODUCED FOR EVERY REQUEST PACKET RECEIVED

FIG.32

replacement sheet

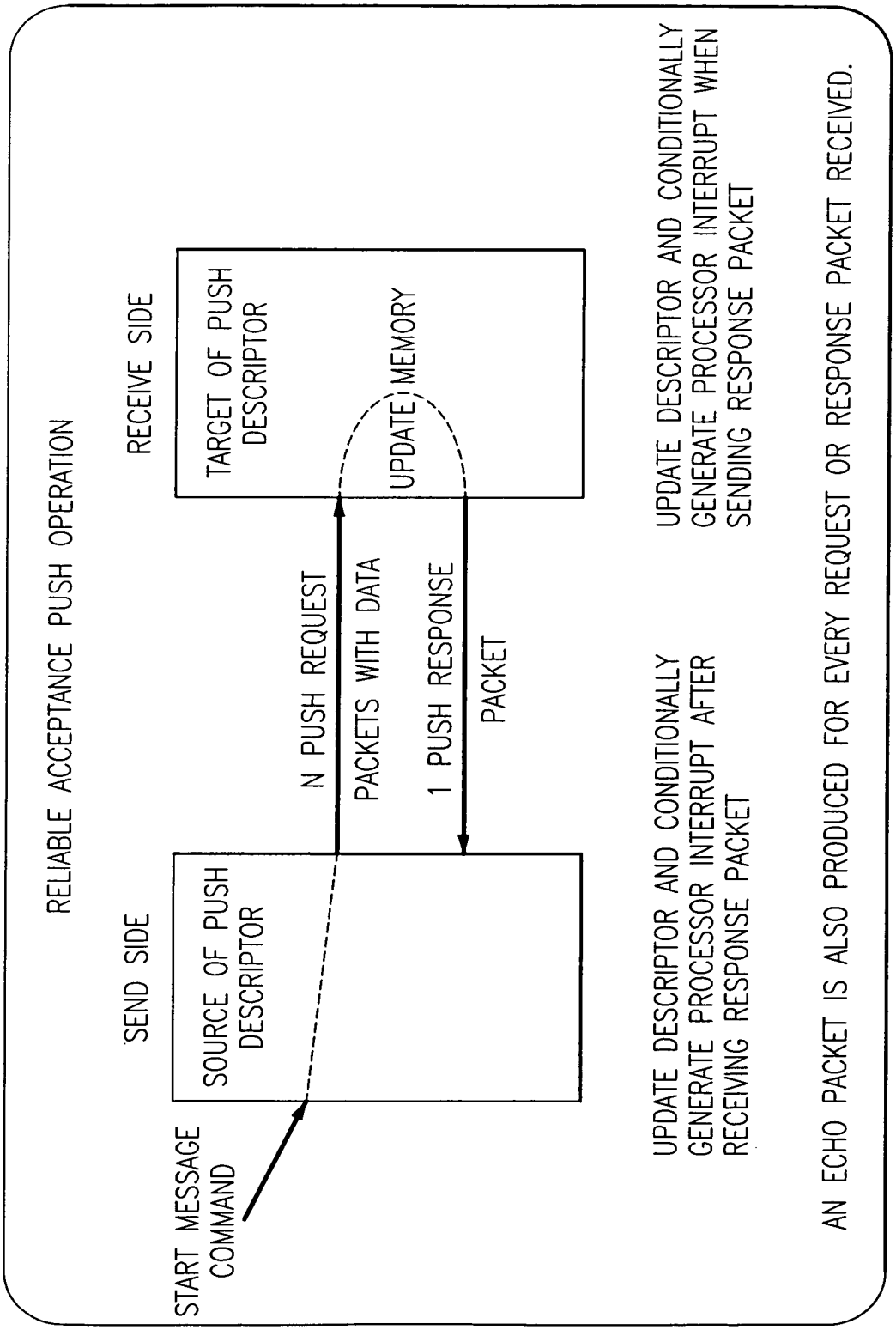
RELIABLE ACCEPTANCE PUSH OPERATION
SEND SIDE
RECEIVE SIDE
SOURCE OF PUSH DESCRIPTOR
TARGET OF PUSH DESCRIPTOR
START MESSAGE COMMAND
N PUSH REQUEST
PACKETS WITH DATA
UPDATE MEMORY
1 PUSH RESPONSE PACKET
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING RESPONSE PACKET
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT WHEN SENDING RESPONSE PACKET
AN ECHO PACKET IS ALSO PRODUCED FOR EVERY REQUEST OR RESPONSE PACKET RECEIVED.

FIG.33

Replacement sheet

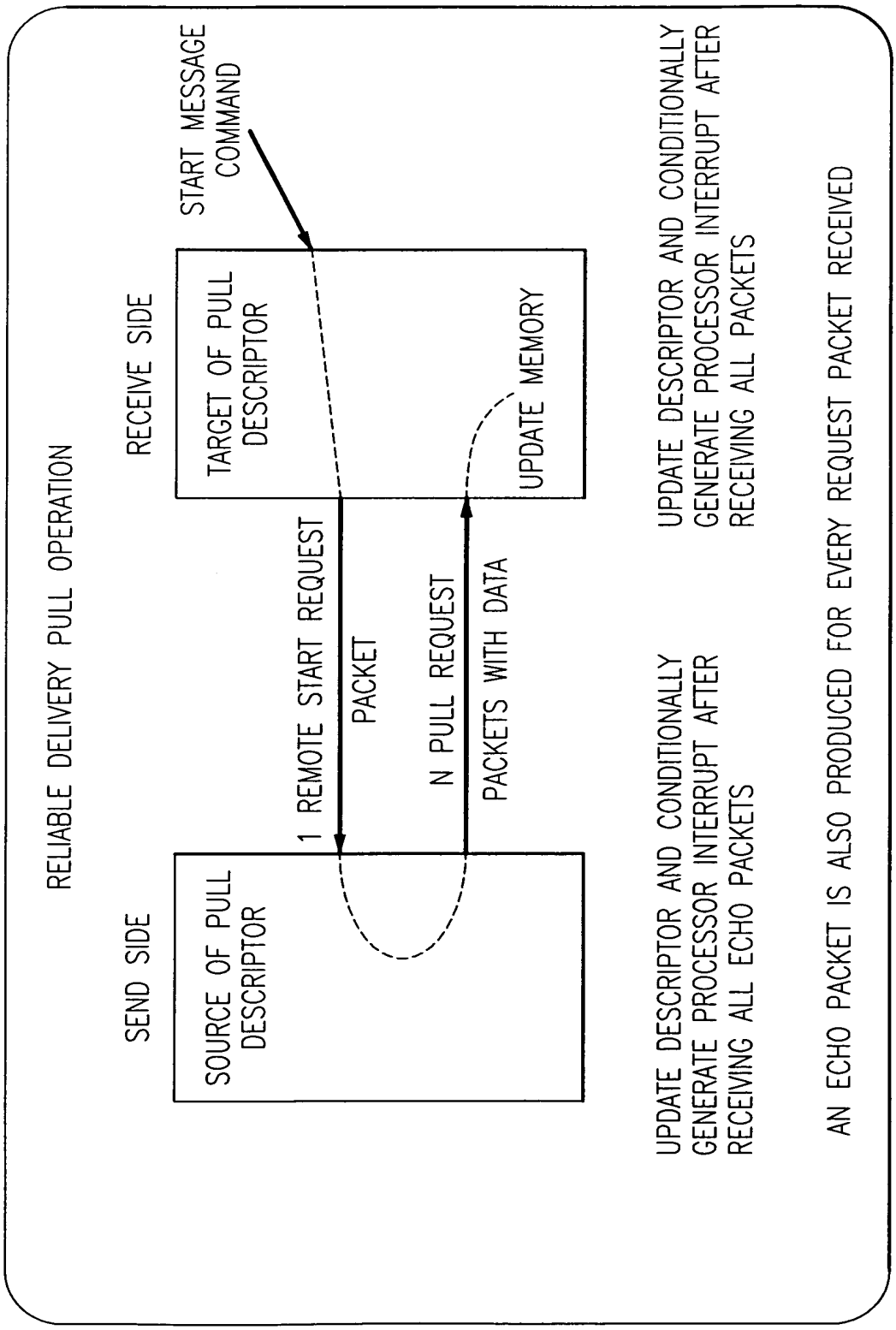
RELIABLE DELIVERY PULL OPERATION
SEND SIDE
RECEIVE SIDE
SOURCE OF PULL DESCRIPTOR
TARGET OF PULL DESCRIPTOR
START MESSAGE COMMAND
1 REMOTE START REQUEST PACKET
N PULL REQUEST PACKETS WITH DATA
UPDATE MEMORY
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING ALL ECHO PACKETS
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING ALL PACKETS
AN ECHO PACKET IS ALSO PRODUCED FOR EVERY REQUEST PACKET RECEIVED

FIG.34

Replacement sheet

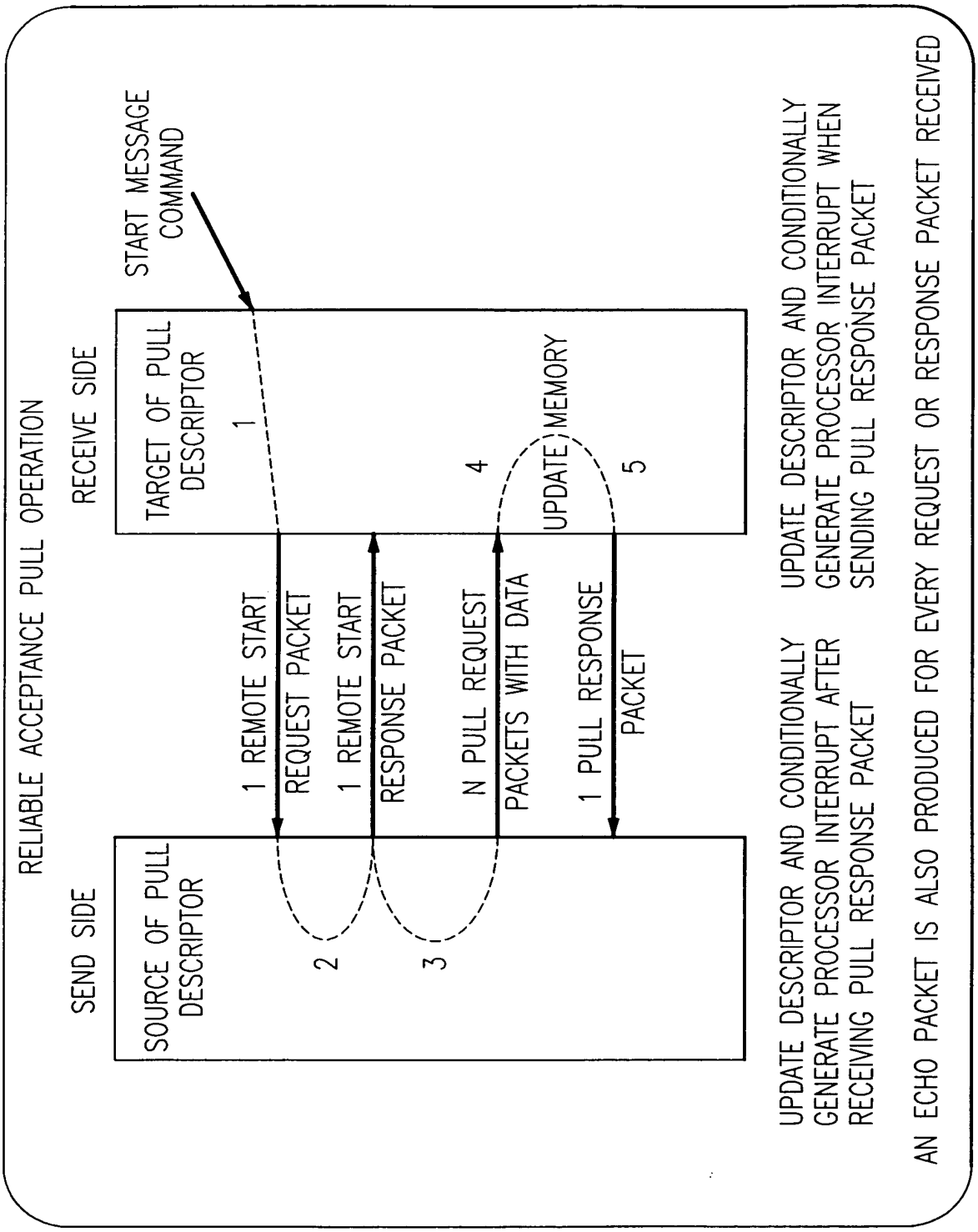
RELIABLE ACCEPTANCE PULL OPERATION
SEND SIDE
RECEIVE SIDE
SOURCE OF PULL DESCRIPTOR
TARGET OF PULL DESCRIPTOR
START MESSAGE COMMAND
1
1 REMOTE START REQUEST PACKET
2
1 REMOTE START RESPONSE PACKET
3
N PULL REQUEST PACKETS WITH DATA
4
UPDATE MEMORY
1 PULL RESPONSE PACKET
5
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING PULL RESPONSE PACKET
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT WHEN SENDING PULL RESPONSE PACKET
AN ECHO PACKET IS ALSO PRODUCED FOR EVERY REQUEST OR RESPONSE PACKET RECEIVED

FIG.35

replacement sheet

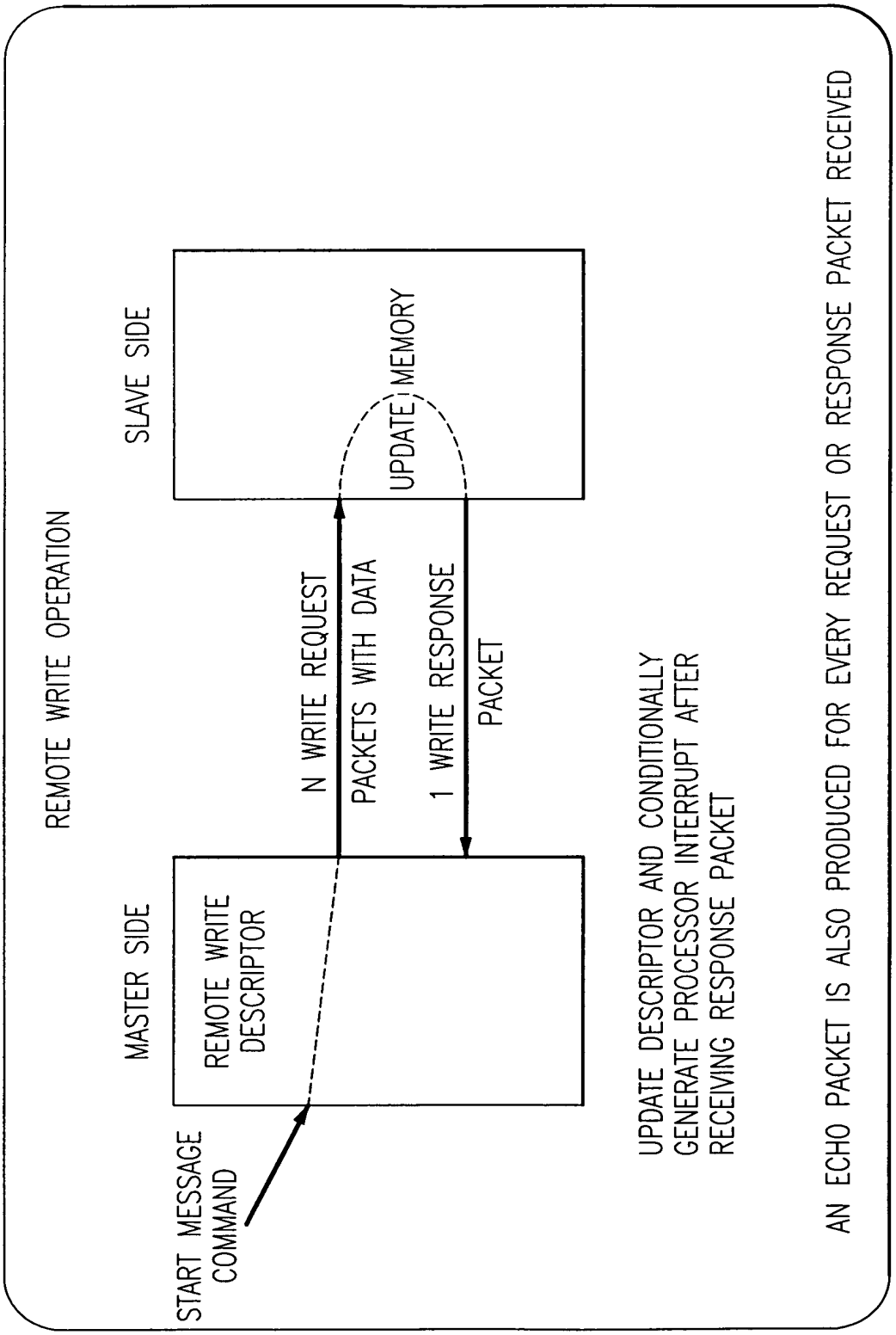
REMOTE WRITE OPERATION
MASTER SIDE
SLAVE SIDE
REMOTE WRITE DESCRIPTOR
START MESSAGE COMMAND
N WRITE REQUEST
PACKETS WITH DATA
1 WRITE RESPONSE
PACKET
UPDATE MEMORY
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER RECEIVING RESPONSE PACKET
AN ECHO PACKET IS ALSO PRODUCED FOR EVERY REQUEST OR RESPONSE PACKET RECEIVED

FIG.36

replacement sheet

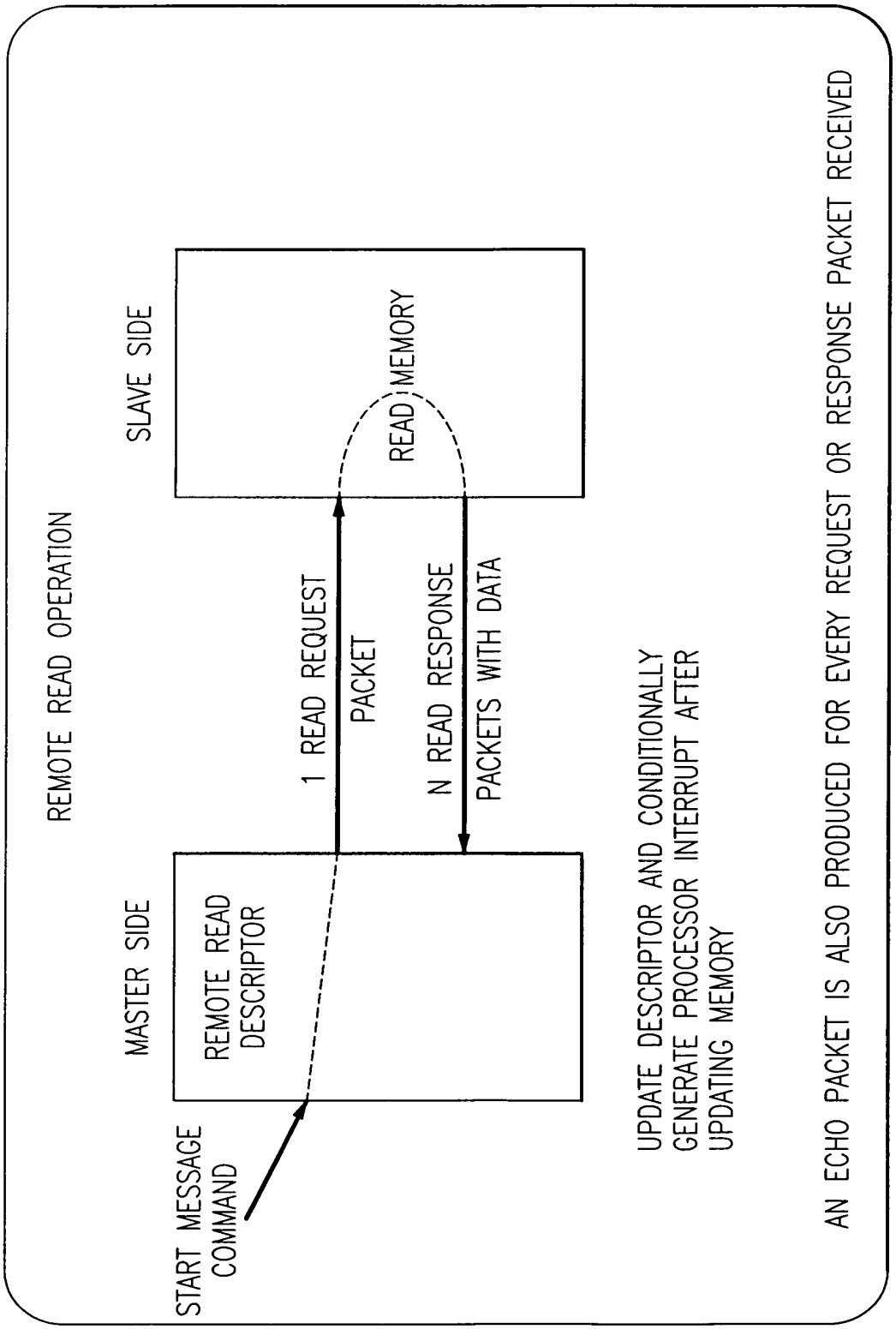
REMOTE READ OPERATION
MASTER SIDE
SLAVE SIDE
REMOTE READ DESCRIPTOR
READ MEMORY
START MESSAGE COMMAND
1 READ REQUEST PACKET
N READ RESPONSE PACKETS WITH DATA
UPDATE DESCRIPTOR AND CONDITIONALLY GENERATE PROCESSOR INTERRUPT AFTER UPDATING MEMORY
AN ECHO PACKET IS ALSO PRODUCED FOR EVERY REQUEST OR RESPONSE PACKET RECEIVED

FIG.37

Replacement Sheet

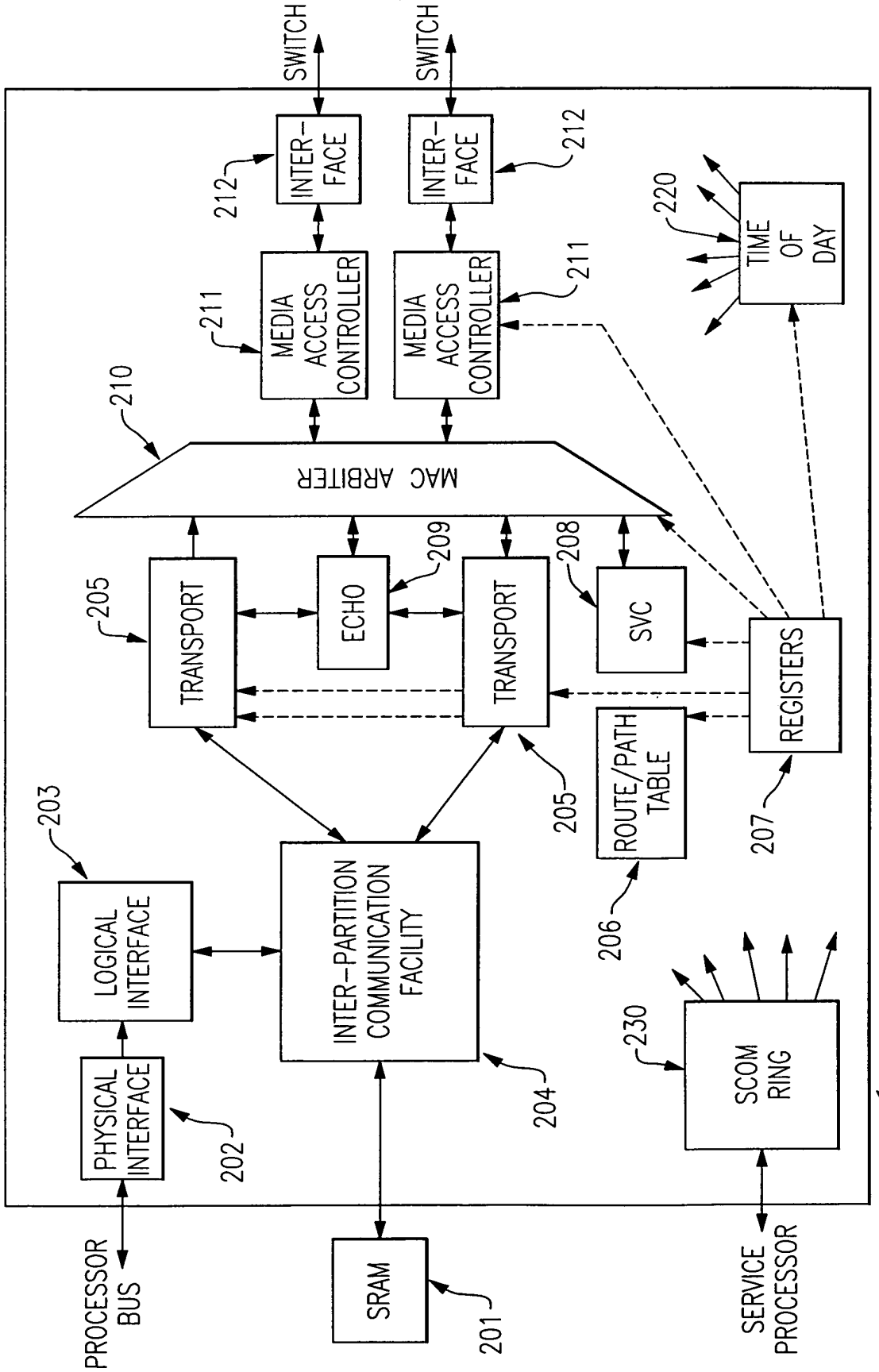

FIG.38

Replacement sheet

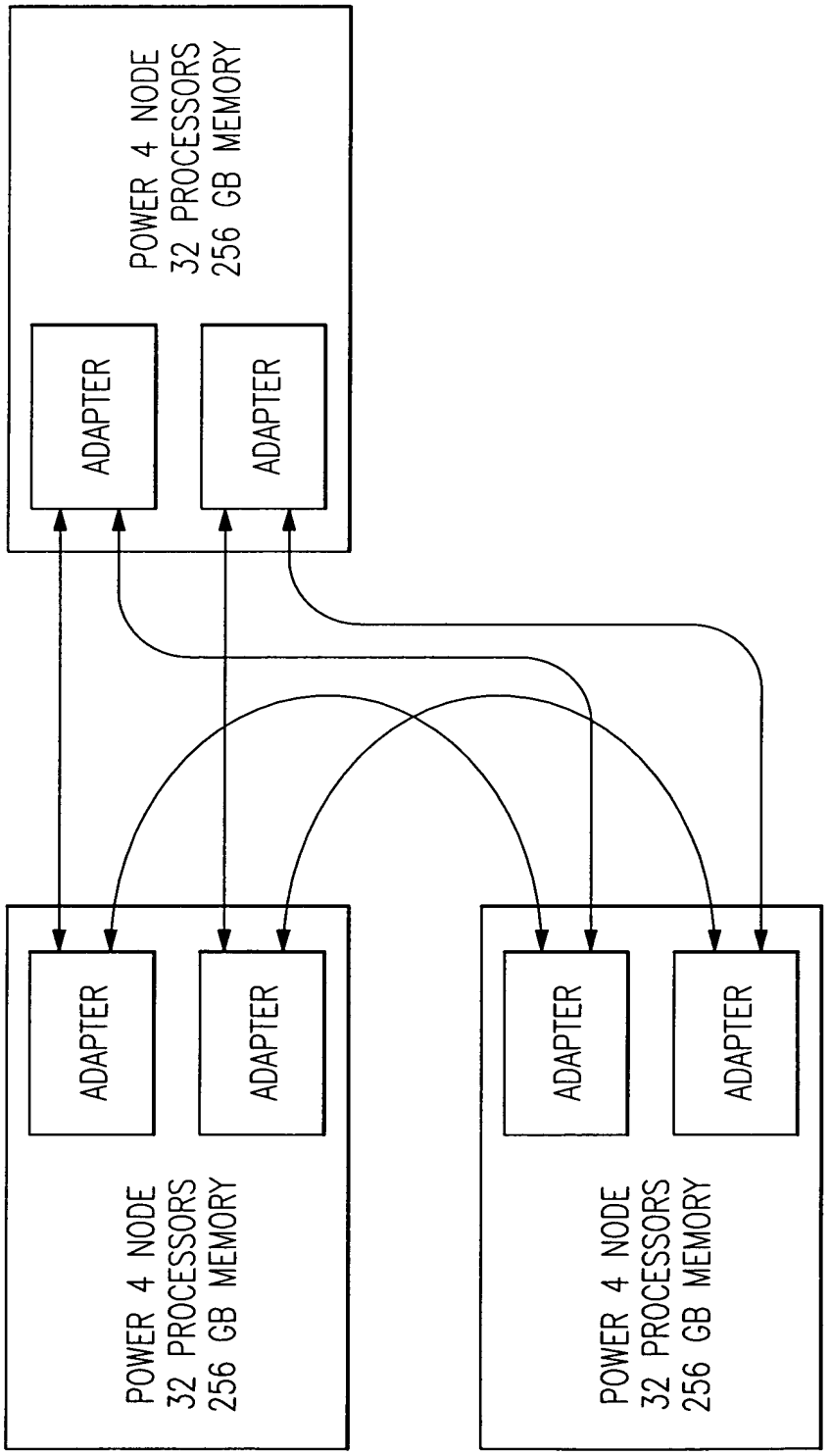

FIG.39

Replacement sheet

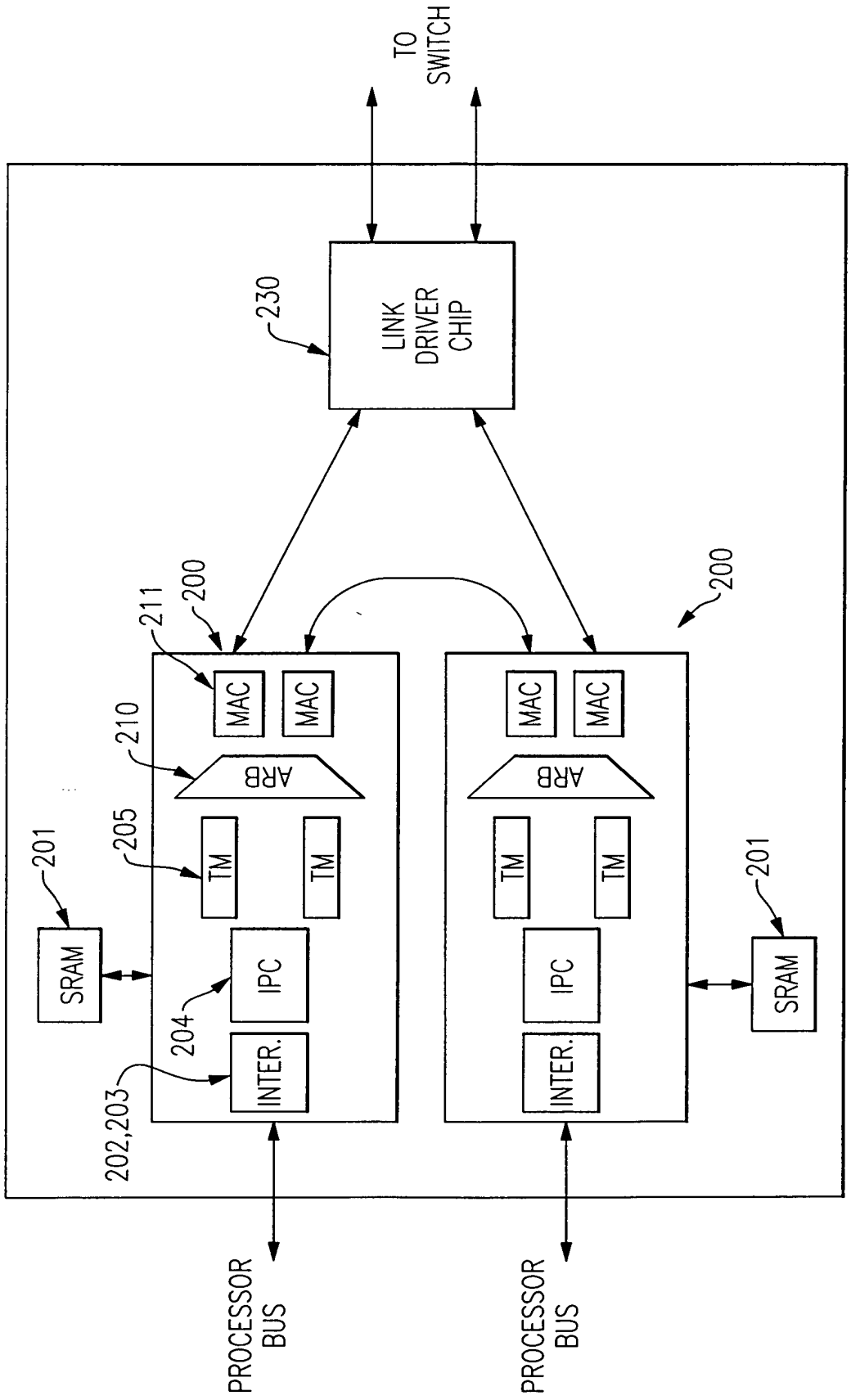

FIG.40

Replacement sheet

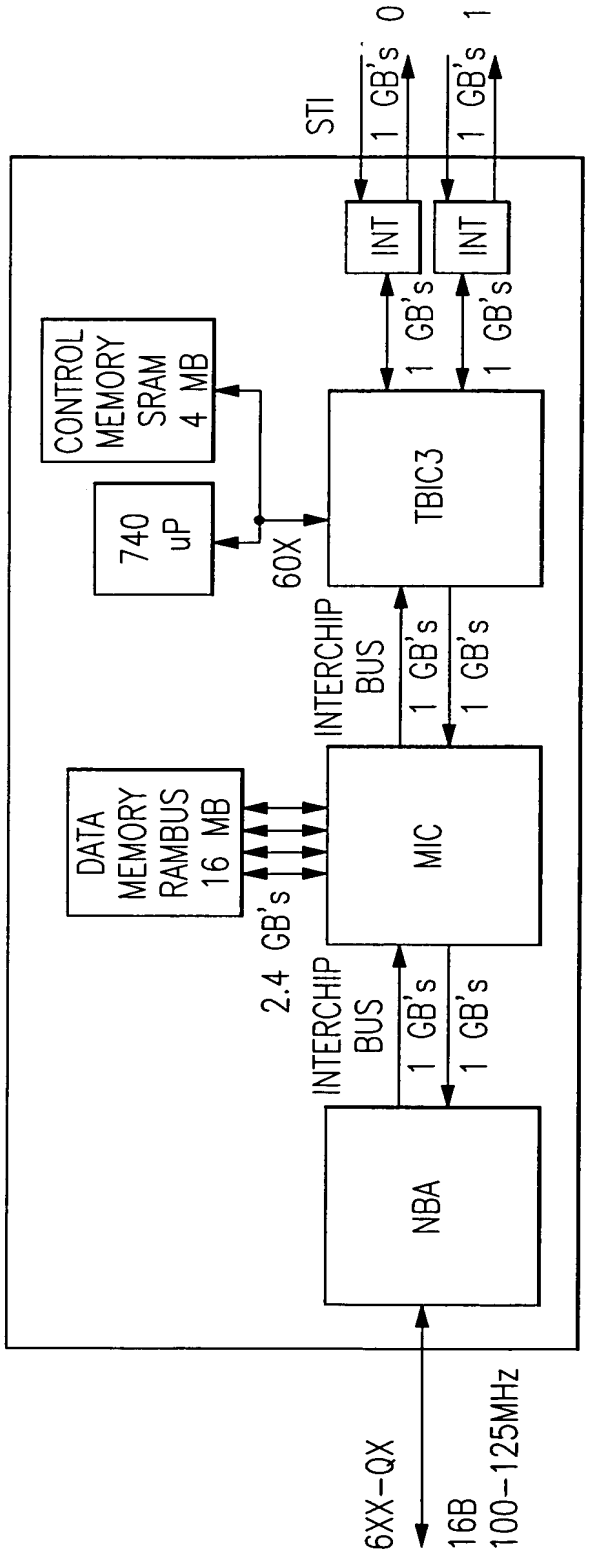

FIG.41

replacement sheet

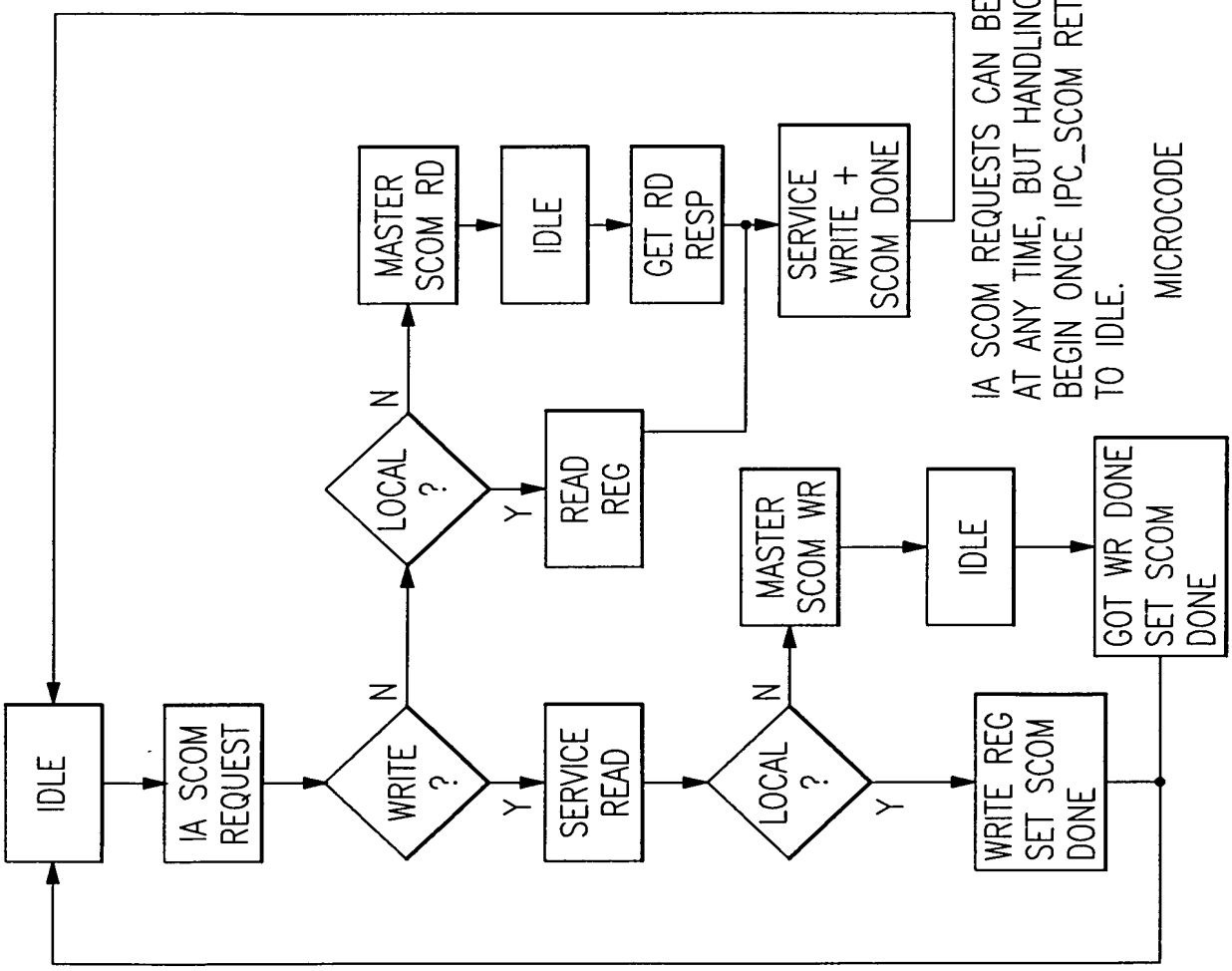

FIG.42

replacement sheet

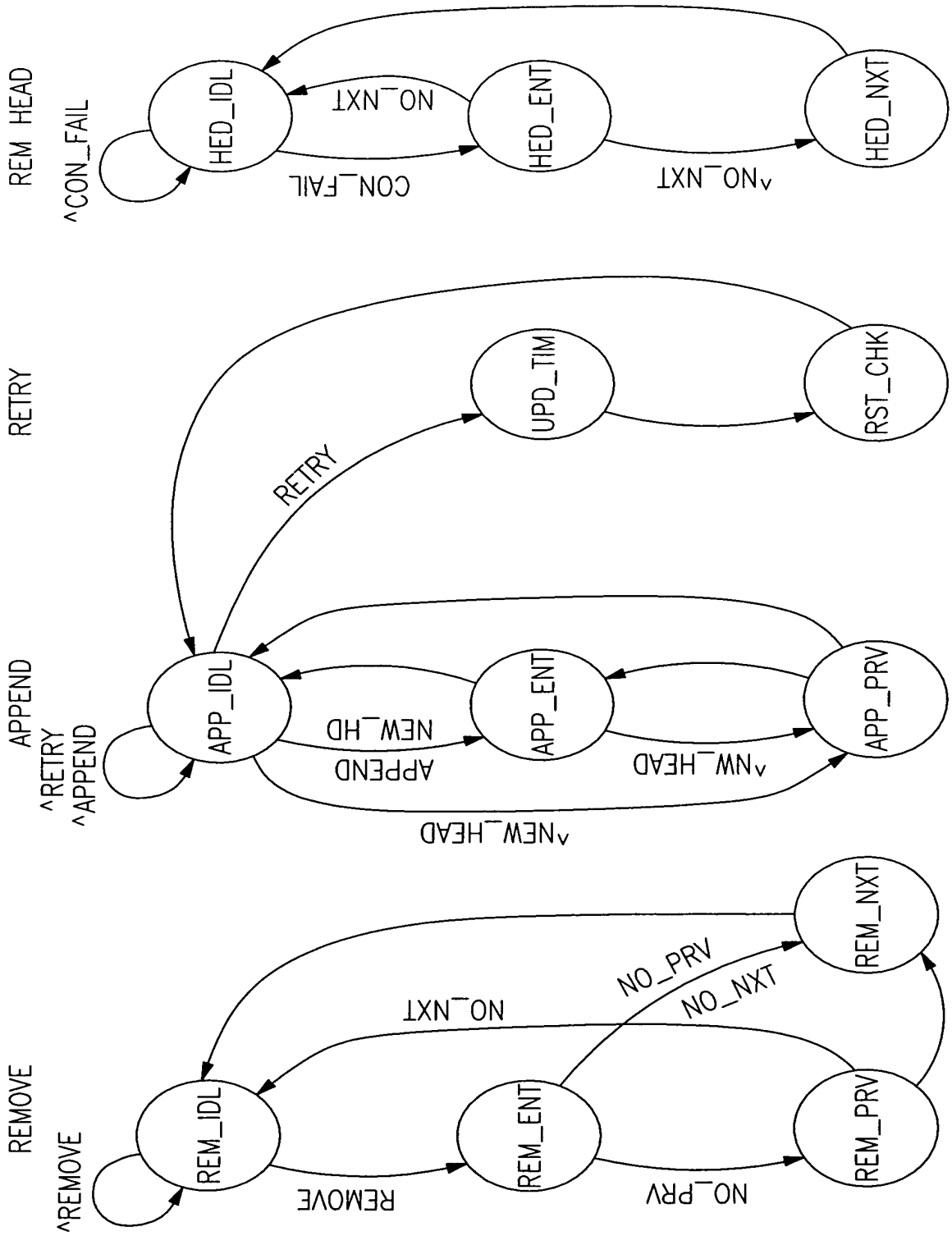

FIG.43

Replacement sheet

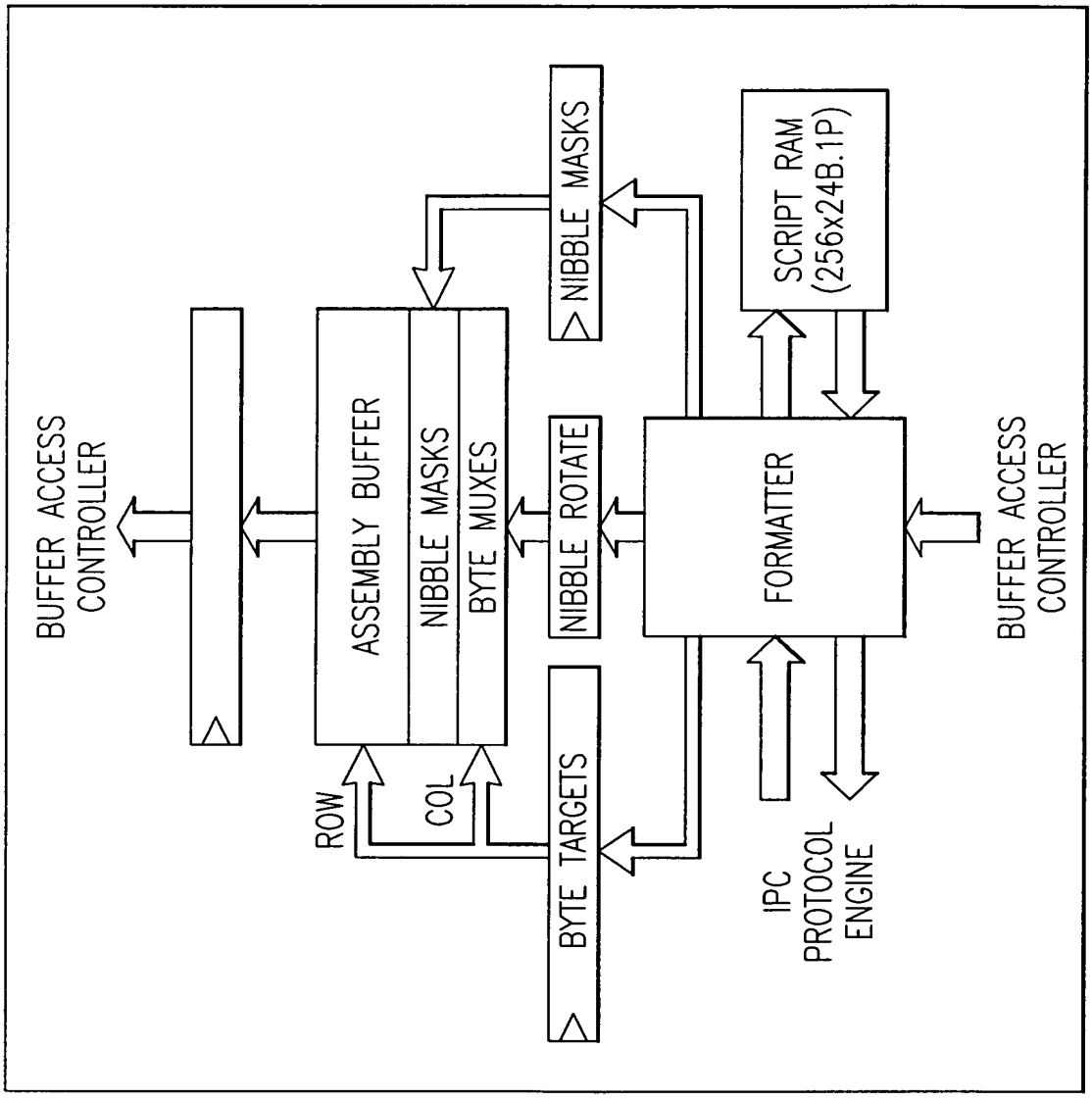

FIG.44

Replacement sheet

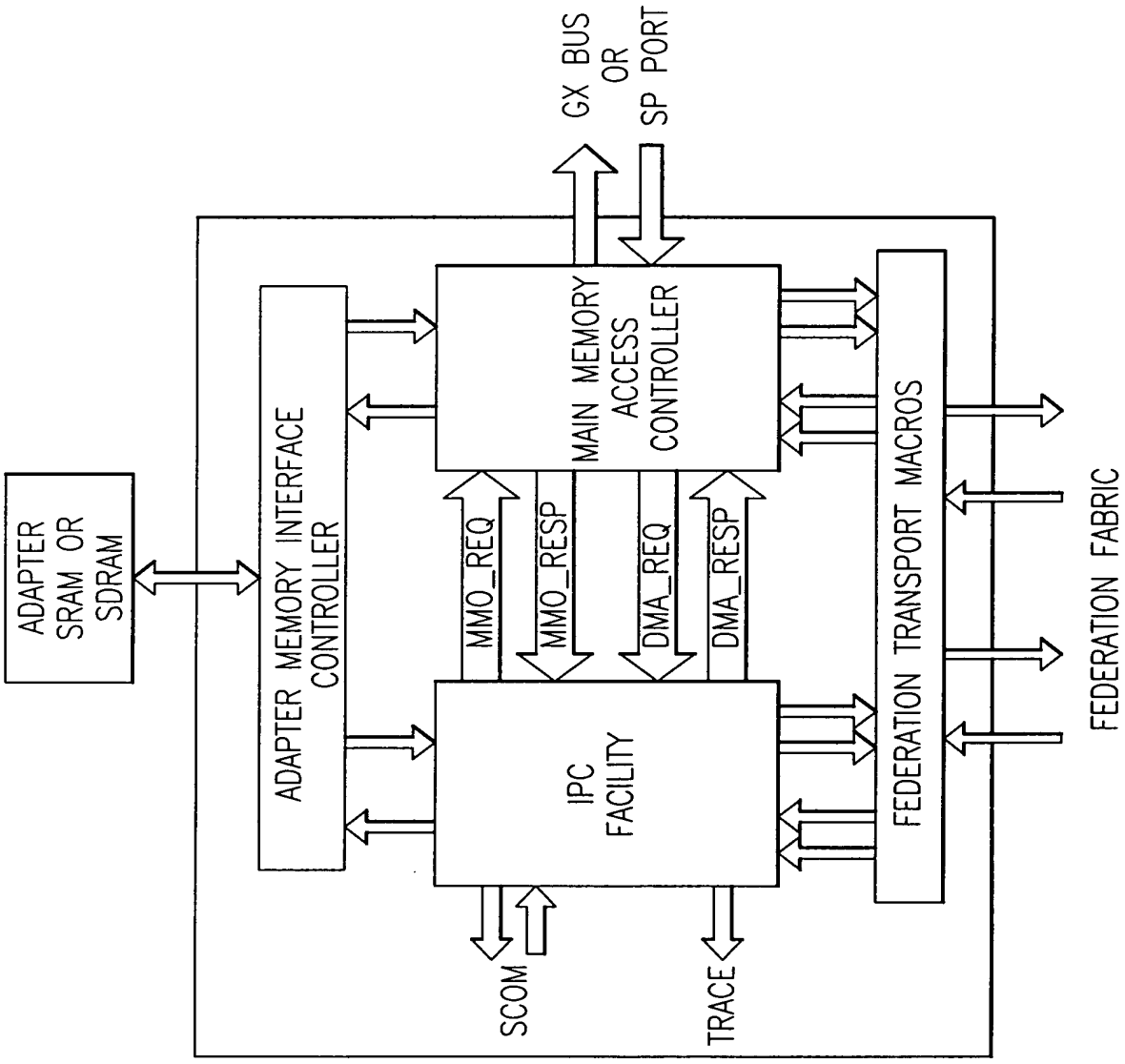

FIG.45

Replacement sheet

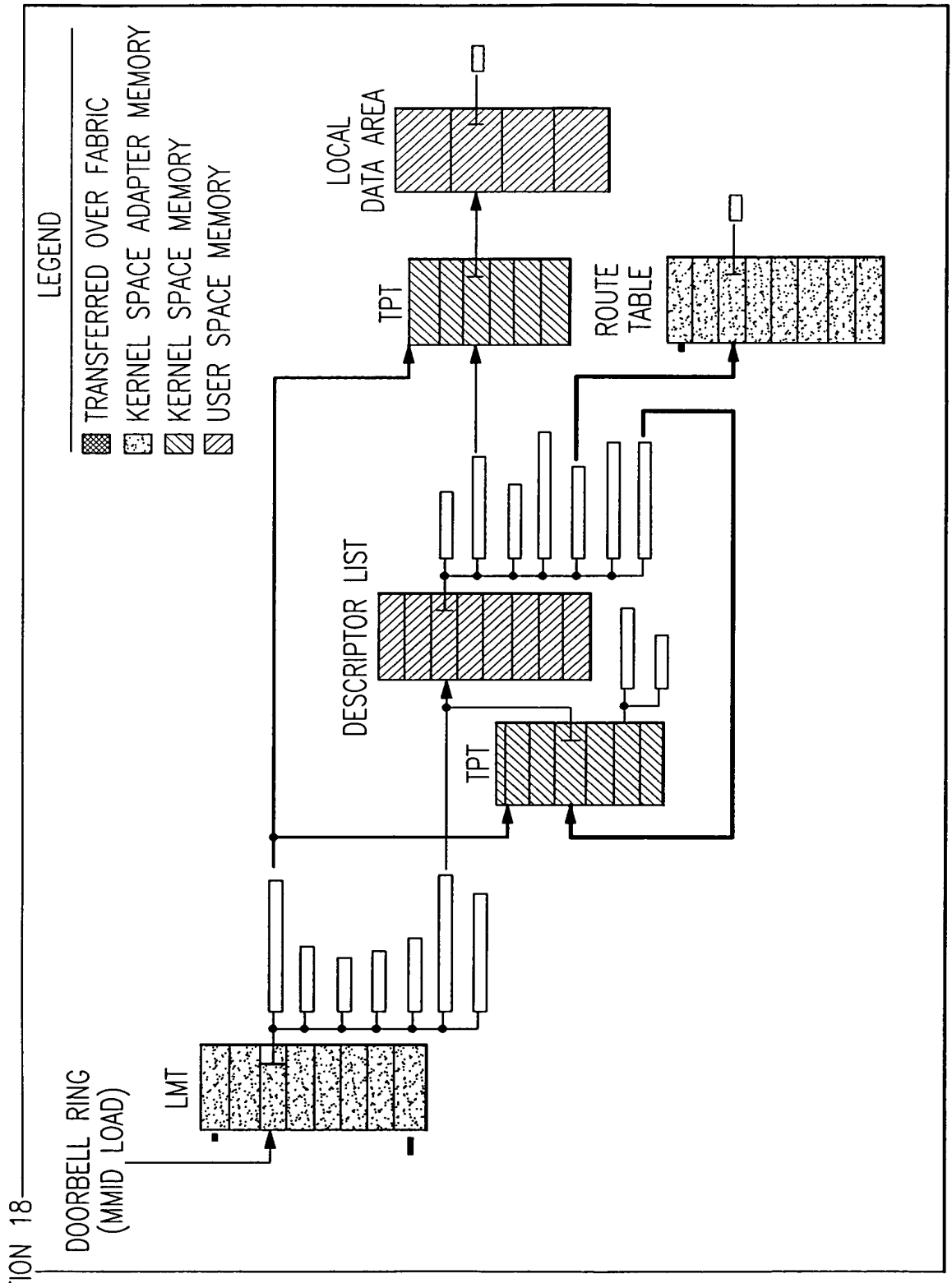

FIG.46

replacement sheet

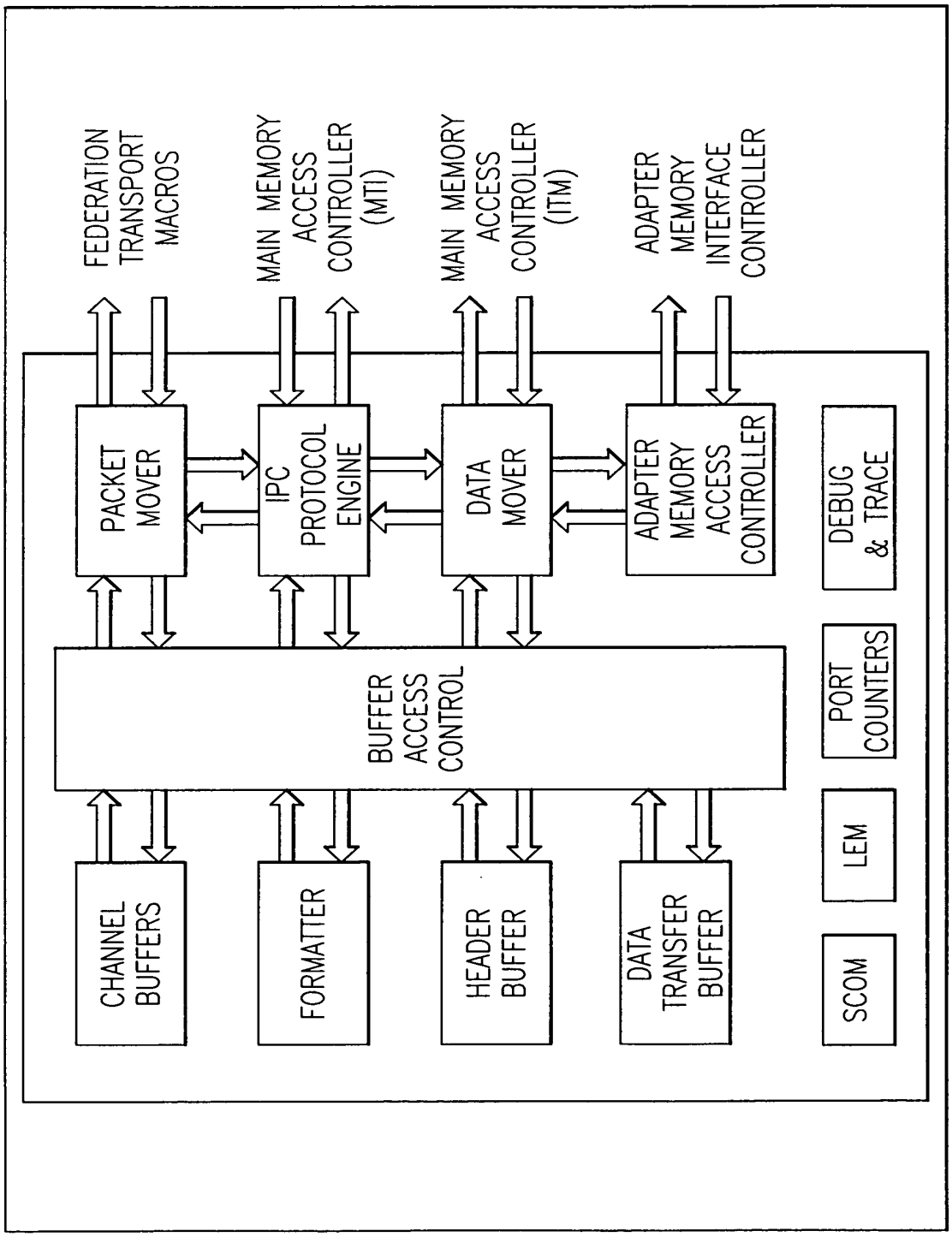

FIG.47

Replacement sheet

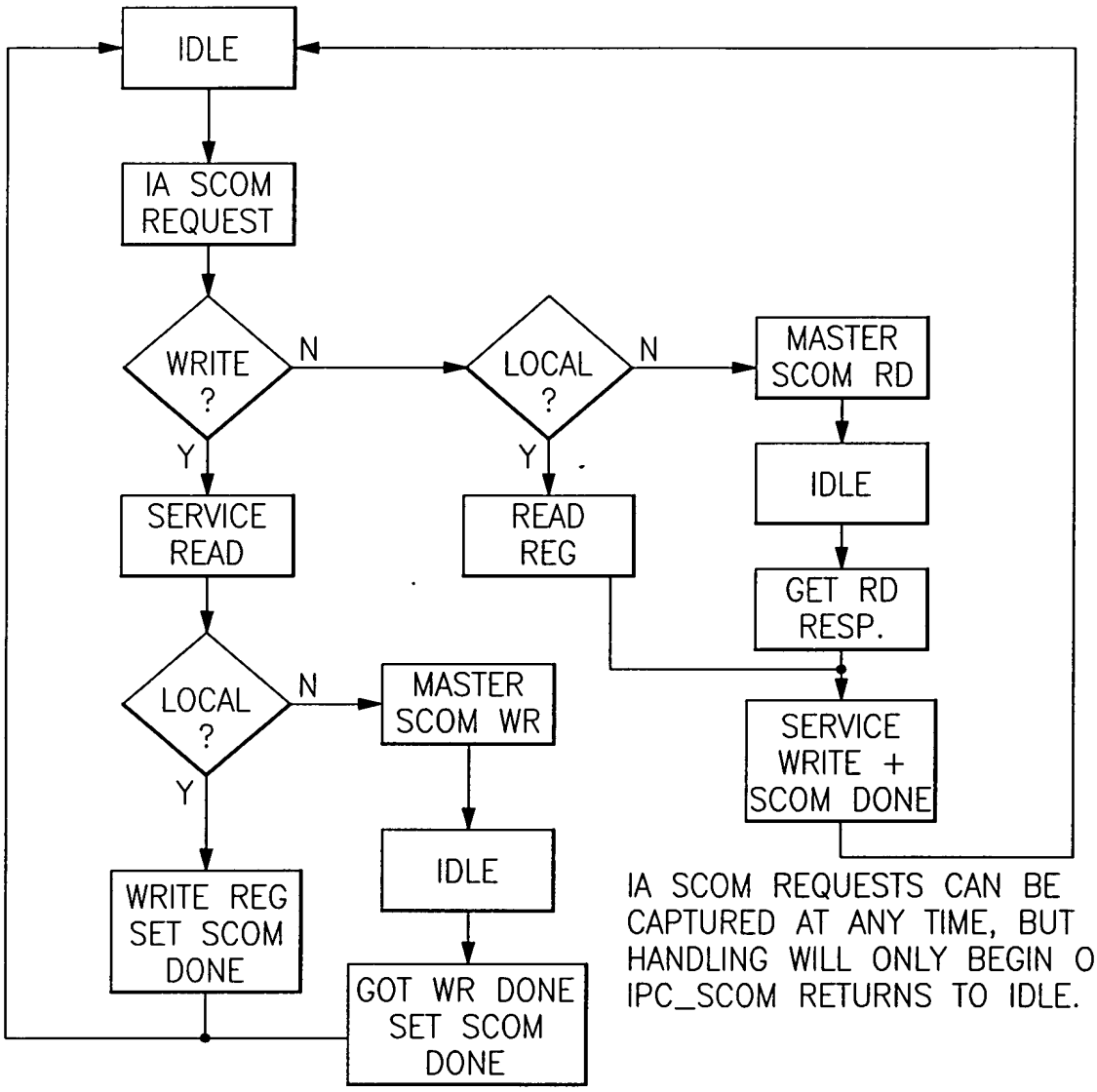

FIG.48

Replacement sheet

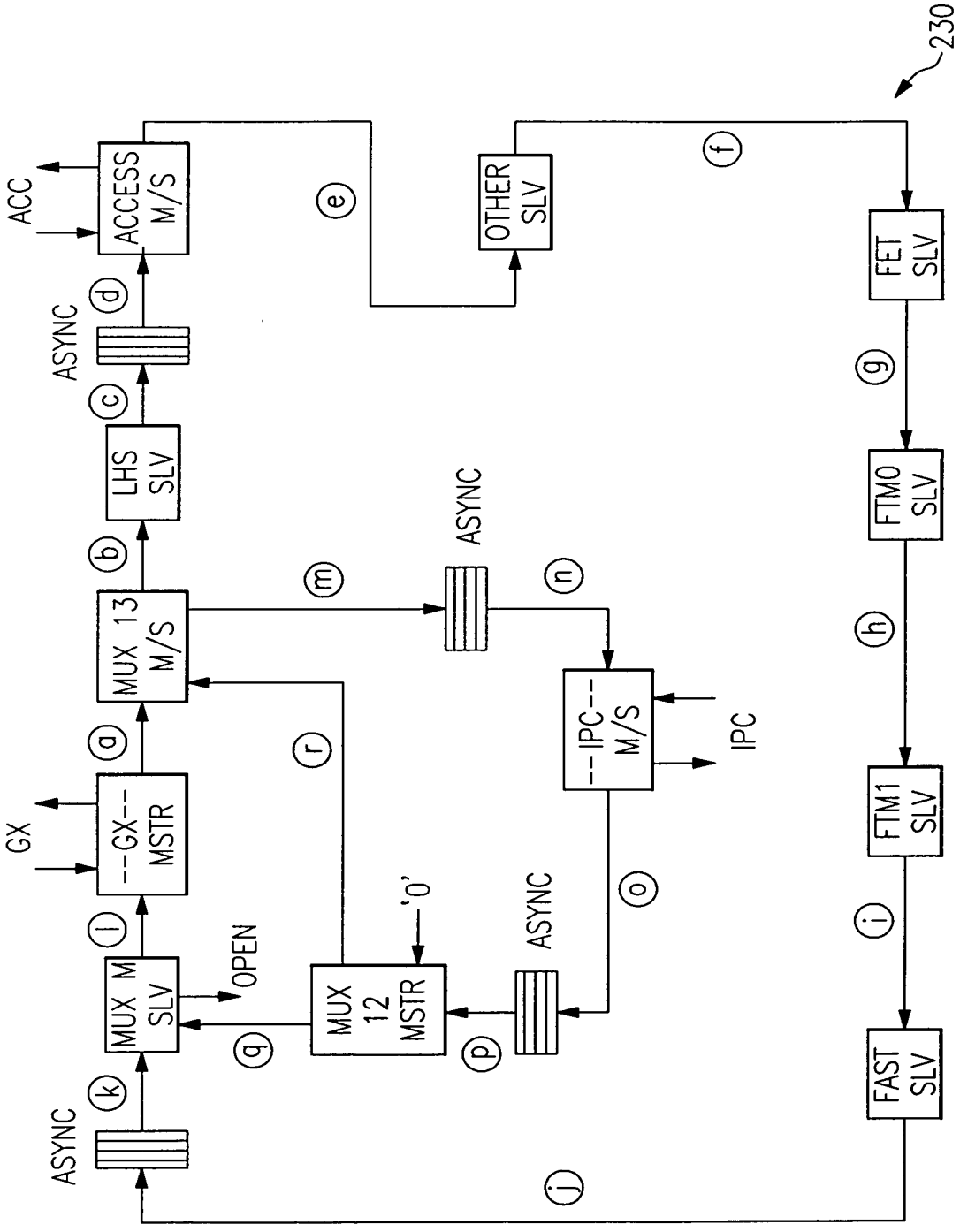

FIG.49

Replacement sheet

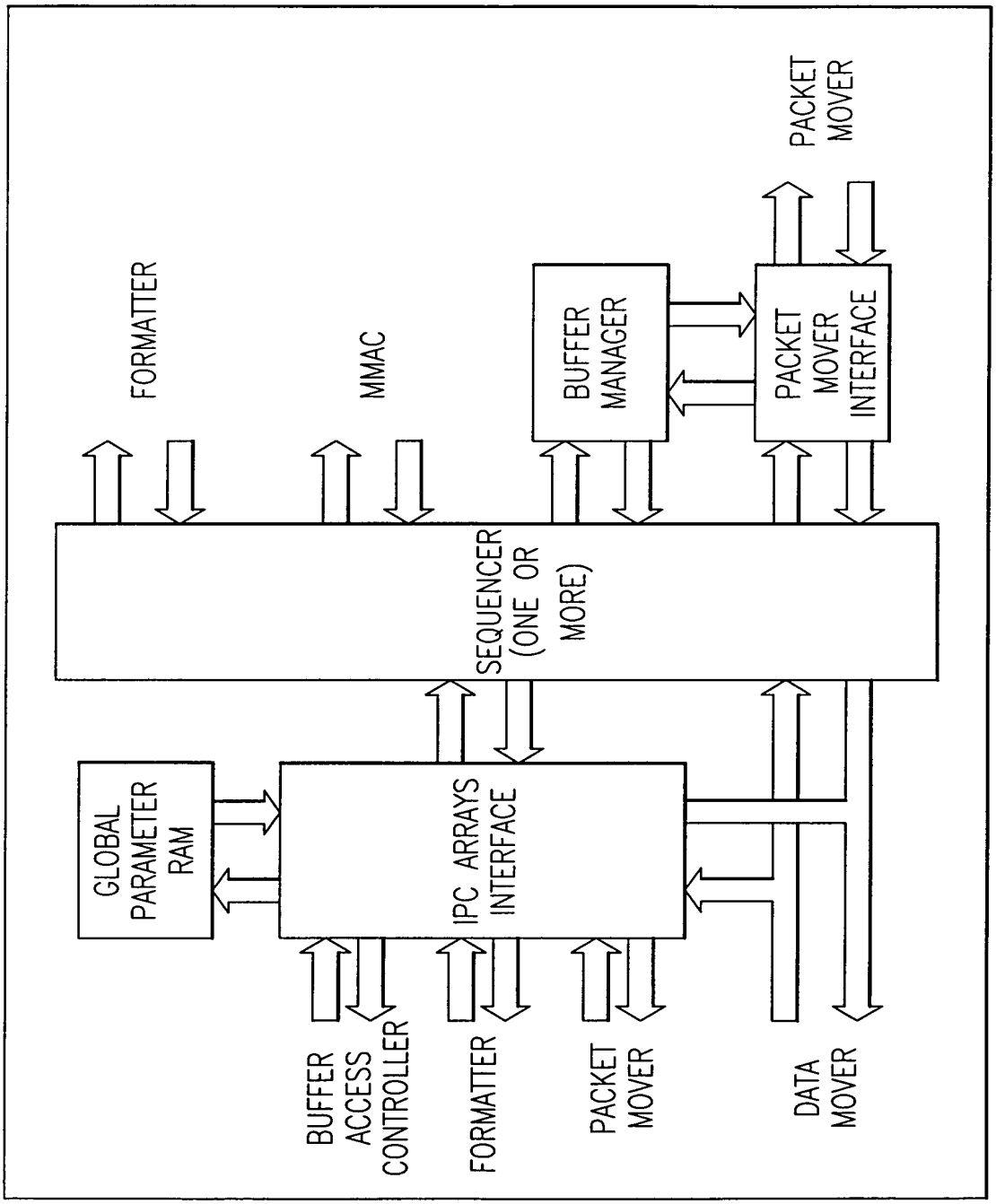

FIG.50